MODIFICATION NO. M094

CONTRACTOR AND ADDRESS:	Brookhaven Science Associates, LLC Brookhaven National Laboratory Upton, NY 11973
MODIFICATION FOR:	Recognition of previous obligation increases; Revision to Clause I.104, Obligation of Funds; Revision to Clause I.69, Key Personnel; Replacement of Clause I.87, Acquisition and Use of Environmentally Preferable Products and Services, with Affirmative Procurement Program – March 2003; Replacement of Attachment J.2, Appendix B, Critical Outcomes, Objectives, and Performance Measures for FY 2002; Revision of Attachment J.3, Appendix C, Special Financial Institution Account; Replacement of Attachment J.5, Appendix E, Make-or-Buy Plan; Replacement of Attachment J.9, Appendix I, DOE Directives; Replacement of Attachment J.12, Appendix L, Computation of Fee
PRIOR OBLIGATION:	$ 2,213,024,776.33
INCREASE IN MODS A091 – A093	A091 23,352,010.36 A092 24,015,289.11 A093 192,546,627.24
INCREASE IN THIS MODIFICATION	-0-
CURRENT TOTAL OBLIGATION:	$ 2,452,938,703.04

THIS MODIFICATION, effective the 18th day of April 2003, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES DEPARTMENT OF ENERGY (hereinafter referred to as "DOE"), and BROOKHAVEN SCIENCE ASSOCIATES, LLC (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the Government and the Contractor entered into Contract No. DE-AC02-98CH10886 on the 5th day of January 1998, for the operation of the Brookhaven National Laboratory; and

WHEREAS, said contract has been modified previously, and the parties desire to modify said contract further, as hereinafter provided; and

WHEREAS, this modification is authorized by law, including 41 U.S.C. 252(c)(15), P.L. 95-91 and other applicable law;

NOW, THEREFORE, said contract, as modified previously, is hereby further modified as follows:

1. **Clause I.69** – Delete 952.215-70, Key Personnel (DEC 2000) in its entirety and replace with the attached updated revision of 952.215-70, Key Personnel (DEC 2000).

2. **Clause I.87** – Delete 970.5223-2, Acquisition and Use of Environmentally Preferable Products and Services (DEC 2000) in its entirety and replace with the attached updated revision of 970.5223-2, Affirmative Procurement Program – March 2003.

3. **Clause I.104** - OBLIGATION OF FUNDS: The first sentence of paragraph (a) is revised to read as follows: "The amount presently obligated by the Government with respect to this contract is $2,452,938,703.04.

4. **Attachment J.2, Appendix B – Critical Outcomes, Objectives, and Performance Measures 2002**, identified as Modification M090 is deleted in its entirety and replaced with the attached revised Appendix B, Critical Outcomes, Objectives, & Performance Measures for FY 2003, identified as Modification M094.

5. **Attachment J.3, Appendix C – Special Financial Institution Account** – Add Amendment to Agreement Checks-Paid Method of Letter of Credit Financing dated 4/4/03.

6. **Attachment J.5, Appendix E – Make-or-Buy Plan** – Appendix E, Make-or-Buy Plan dated September 1999, identified as Modification M090 is deleted in its entirety and replaced with the attached revised, Appendix E, Make-or-Buy Plan FY 2003, identified as Modification M094.

7. **Attachment J.9, Appendix I – DOE Directives:** DOE Directives identified as Modification M090 is deleted in its entirety and replaced with the attached Appendix I, identified as Modification M094.

8. **Attachment J.12, Appendix L - Fee Computation:** FY 2002 Appendix L, Computation of Fee, identified as Modification M090 is deleted in its entirety and replaced with the attached revised FY 2003, Appendix L, Computation of Fee, identified as Modification M094.

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY

BY: _____

Robert P. Gordon
Contracting Officer
(Title)

DATE: 4-18-03

BROOKHAVEN SCIENCE
ASSOCIATES, LLC

BY: _____

Brian P. Sack
Chief Financial Officer
(Title)

DATE: 4/18/03

CLAUSE I.69 - DEAR 952.215-70 KEY PERSONNEL (DEC 2000)

(a) The personnel listed below or elsewhere in this contract are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must:

(1) Notify the Contracting Officer reasonably in advance;

(2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and

(3) obtain the Contracting Officer's written approval.

Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization, the Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

(b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

Dr. Praveen Chaudhari
Gregory Fess, J.D.
Dr. Thomas Kirk
Dr. Brian P. Sack
Michael Bebon
Margaret Lynch
Dr. Nora D. Volkow
Dr. Ralph James
Dr. Peter Paul
Thomas Sheridan
Dr. Doon Gibbs
Leslie M. Hill
Dr. James Tarpinian

CLAUSE I.87 - DEAR 970.5223-2
AFFIRMATIVE PROCUREMENT PROGRAM – MARCH 2003

(a) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13101 and the U.S. Department of Energy (DOE) Affirmative Procurement Program Guidance. This guidance includes requirements concerning environmentally preferable products and services, recycled content products and biobased products. This guidance is available on the Internet.

(b) In complying with the requirements of paragraph (a) of this clause, the Contractor shall coordinate its activities with the DOE Recycling Coordinator. Reports required by
paragraph (c) of this clause shall be submitted through the DOE Recycling Coordinator.

(c) The Contractor shall prepare and submit reports, at the end of the Federal fiscal year,
on matters related to the acquisition of items designated in EPA's Comprehensive Procurement Guidelines that Federal agencies and their Contractors are to procure with recovered/recycled content.

(d) If the Contractor subcontracts a significant portion of the operation of the Government facility which includes the acquisition of items designated in EPA's Comprehensive Procurement Guidelines, the subcontract shall contain a clause substantially the same as this clause. The EPA Comprehensive Procurement Guidelines identify products which Federal agencies and their Contractors are to procure with recycled content pursuant to 40 CFR 247. Examples of such a subcontract would be operation of the facility supply function, construction or remodeling at the facility, or maintenance of the facility motor vehicle fleet. In situations in which the facility management contractor can reasonably determine the amount of products with recovered/recycled content to be acquired under the subcontract, the facility management contractor is not required to flow down the reporting requirement of this clause. Instead, the facility management contractor may include such quantities in its own report and include an agreement in the subcontract that such products will be acquired with recovered/recycled content and that the subcontractor will advise if it is unable to procure such products with recovered/recycled content because the product is not available (i) competitively within a reasonable time, (ii) at a reasonable price, or, (iii) within the performance requirements. If reports are required of the subcontractor, such reports shall be submitted to the facility management contractor. The reports may be submitted at the conclusion of the subcontract term provided that the subcontract delivery term is not multi-year in nature. If the delivery term is multi-year, the subcontractor shall report its accomplishments for each Federal fiscal year in a manner and at a time or times acceptable to both parties

(e) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "subcontractor" and the term "DOE Recycling Coordinator" will be understood to mean "Contractor Recycling Coordinator."

(End of Clause)

2215.6

U.S. Department of Energy

and

Brookhaven Science Associates, LLC

ATTACHMENT J.2

APPENDIX B

CRITICAL OUTCOMES, OBJECTIVES AND PERFORMANCE MEASURES

FY 2003

BROOKHAVEN NATIONAL LABORATORY

Contract No. DE-AC02-98CH10886
Modification No. M094

TABLE OF CONTENTS

Performance Evaluation System

I. Introduction

This Contract Appendix sets forth the performance evaluation system (including processes, criteria, schedules, and measures) that will be used to evaluate the overall performance of Brookhaven Science Associates (BSA) in the management and operation of Brookhaven National Laboratory (BNL) in Fiscal Year 2003 (FY03).

For FY03, in accordance with Article 6 of the Contract, the Parties have agreed to use a Performance-Based Management System (PBMS) that includes clear and reasonable objectives, against which BSA's overall performance will be evaluated. For this purpose, the parties have agreed to an objective hierarchy consisting of Critical Outcomes, underlying Objectives, and associated weighted Performance Measures and Metrics for the assessment of BSA's performance and the resulting determination of fee.

The DOE Office of Science (SC) identified high-level expectations in six critical activities/functional areas that SC would use to guide its regular assessment of Laboratory performance. These critical areas are Science, Environment, Safety & Health (ES&H), Infrastructure, Business Operations, Leadership and Stakeholder Relations. SC expects SC/Headquarters (HQ) program managers, field offices, and laboratories to work in partnership to develop laboratory-specific outcomes, objectives, and measures that support these high-level expectations and to use self-assessment as a tool to achieve desired outcomes and continuous improvement.

This "Critical Outcome Process" is designed to measure overall performance and drive the improvement agenda of the Laboratory by linking Laboratory rewards, i.e., performance ratings and associated fees, to a prioritized set of objectives that have been mutually developed by the Department of Energy (DOE) and BSA. DOE and BSA have mutually agreed to the specific Critical Outcomes, Objectives, and Performance Measures contained herein, and, as described in Articles 6 and 7, agree to a reassessment of the process, prior to the beginning of each evaluation period.

II. Critical Outcome, Objective, and Measure Development

The following concepts are used in the development of the Performance Measures and are provided for information and clarification in the process:

A. The Critical Outcome process must be flexible to accommodate changes as planned improvements are realized and/or customer priorities vary. For example, even though the Critical Outcomes and Objectives are intended as sustainable targets over a 3-5 year and 1-3 year time frames respectively, their relative weights are expected to change more frequently. Re-prioritization of the Critical Outcomes and Objectives is a fundamental part of the annual Critical Outcome process.

B. Critical Outcomes, their underlying Objectives, and associated Performance Measures should influence the improvement agenda of the Laboratory. They should incorporate best practices and reflect the DOE and BNL functional managers' judgment as to the key performance elements for overall successful operations. Best practices should consider cost/risk/benefit effectiveness. Examples of key elements addressed are:

Quality of product
Timely delivery
Cost reduction
Cycle time reduction
User friendliness
DOE requirements

C. Performance Measures should be results-oriented and should focus on criteria that are objectively measurable and allow for meaningful trend and rate-of-change analysis where possible. They should use qualitative criteria in those cases where objective criteria will not produce meaningful evaluation results.

D. Performance Measures may reference industry business standards that are meaningful, appropriate and consistent with DOE requirements, rather than arbitrary standards. To this end, benchmarking initiatives are encouraged. Using benchmarks to change targets should consider whether it is cost effective to make further improvements or if the target level should be raised.

E. The relative weighting and metrics for each Performance Measure shall be established prior to the start of the performance period by mutual agreement of the Contractor and the DOE Contracting Officer. If the parties cannot reach agreement, the Contracting Officer shall have the right to establish such weights, subject to the provisions outlined in Article 7 of the Prime Contract.

F. Background and supporting information (such as purpose, means and strategies, assumptions definitions, etc.), shall be documented as appropriate.

G. Measures are to be developed in a team approach involving DOE personnel and Laboratory functional managers. Care should be taken to ensure that the resulting measures reflect performance in areas for which the Laboratory functional manager is accountable, correctly reflecting their status as responsible for the performance and desired improvement.

H. If the desired end state of a performance measure is not achieved, and that measure is the final step in achieving its overall Objective, the accomplishment of the measure will move to a DOE requirement until the measure is complete. Lack of attention to the completion of the work identified in the measure may impact the performance ratings in subsequent fiscal years.

I. Absence of a Performance Measure does not diminish the compliance with specified contractual requirements in that area of performance. Failure to meet a significant contractual requirement may result in the Contracting Officer overriding the Performance Measures.

III. Change Control

DOE and BSA acknowledge that implementation of this performance-based contract requires both parties to continually refine selected Performance Measures and metrics, implement data collection and reporting mechanisms, and seek benchmarks against which to set appropriate targets for performance improvement and/or measurement. Continuing effort is needed to refine the system for scoring performance in each of the Critical Outcomes included in this Appendix and for integrating these scores into an overall evaluation rating for each performance period.

The process to change aspects of performance within the fiscal year, if necessary, is described in the Standards Based Management System (SBMS) Subject Area entitled, "Critical Outcome Performance Measures."

IV. Self -Evaluation Scoring

Each Measure, Objective, and Critical Outcome is rated in accordance with the following:

OUTSTANDING	>3.5 to 4.0
EXCELLENT	>2.5 to 3.5
GOOD	>1.5 to 2.5
MARGINAL	>0.5 to 1.5
UNSATISFACTORY	$\leq$ 0 to 0.5

Once the adjectival rating is determined, the cognizant BSA manager (owner) considers other related aspects of performance (e.g., quality, efficiency, etc.) and determines an appropriate numerical rating. For example, a performance measure that met schedule quality expectations with an adjectival rating of Excellent, but an external review indicates that the work represented a "best-in-class" effort, may warrant a 3.5 rating. Similarly, a measure that met quality requirements for an excellent rating but required substantial re-work to achieve it may warrant a numerical score on the lower end of the excellent range, perhaps a 2.6.

A roll-up score is determined by multiplying the weight of each Performance Measure in that Objective by its score. These are added together to develop an overall score for each Objective, which is then translated into an adjectival rating. The process is continued for the Critical Outcomes by multiplying the scores for each Objective within a given Critical Outcome by its corresponding weight, adding the resulting numbers to get a Critical Outcome score, and converting this score to an adjectival rating as done for the Objective level. The same process is then used to calculate an overall score, and then the adjectival rating, at the Laboratory level.

V. Self-Evaluation and Improvement Agenda

BSA and DOE will conduct a mid-year review of status against performance measures defined in Critical Outcomes 1-3. BSA is responsible to define and coordinate the process for conducting the review and to ensure the involvement of appropriate DOE counterparts and BSA management.

On an annual basis, the Laboratory will conduct a formal Self-Evaluation of its performance relative to each Critical Outcome, Objective, and Performance Measure identified. This Report will also address other significant issues or opportunities that arise from the Laboratory's broader Integrated Assessment Program, whether or not they specifically impact the Critical Outcomes.

As part of the mid-year review and the annual self-evaluation process, both BSA and DOE will confirm that performance measures defined (for the current and next FY) adequately reflect the scope and priorities for Laboratory management focus.

VI. DOE Evaluation

The DOE evaluation of BSA's performance, and, in turn, the DOE determination of BSA's Fee, will be based primarily on the performance levels achieved against the weighted Performance Measures identified above. In addition, for each Critical Outcome area, the Contracting Officer may also consider any other relevant information directly or indirectly related to the Critical Outcome, including areas of performance monitoring defined by the Self-Assessment process, that is deemed to have had an impact (either positive or negative) on the Contractor's performance. The fact that the Self-Assessment is "topically aligned" under a particular Critical Outcome Area does not preclude the Contracting Officer from considering the Self-Assessment's impact upon other Critical Outcome areas. Should the Contracting Officer consider other relevant information in establishing the final performance rating for any Critical Outcome, the Contractor will receive written notice of such intent and will be given the opportunity to respond in writing. This agreement does not impact DOE's rights under Article 6, Paragraph (f), of the Prime Contract.

The Director of the Office of Science (SC-1) has the primary responsibility for evaluating Science and Technology performance (Critical Outcome 1), but practical input also will be sought from cognizant DOE Assistant Secretaries, Office Directors, and Program Managers. The Contracting Officer has the primary responsibility for evaluating performance relative to Critical Outcomes 2 and 3 in accordance with the Objectives, Performance Measures, and Metrics of Attachment 1. However, the Contracting Officer shall inform SC-1 of any issues or concerns that should be considered when evaluating the Contractor's performance in Critical Outcome 1. This is especially important in those areas where operational performance could have a significant impact on the Contractor's ability to conduct successful research for

the Department. The Contractor has responsibility to compile the data necessary to document its performance against all measures.

VII. Critical Outcomes, Objectives, and Performance Measures

The Laboratory's Critical Outcomes for Fiscal Year 2003 are:

Science and Technology - *BNL will deliver innovative, forefront science and technology aligned with DOE strategic goals in a safe, environmentally sound, and efficient manner, and will conceive, design, construct, and operate world-class user facilities.*

Environmental Management - *BNL will deliver "Best-In-Class" solutions in conducting the Environmental Restoration Program. Focused upon completion, the results will be protective of the environment, cost effective, and performed in an open exchange with the community, regulators, and other stakeholders. BNL will continue to keep the commitments agreed to in the Memorandum of Understanding signed by Dr. Marburger and Mr. Holland on May 4, 2001.*

Laboratory Management and Operations - *BNL will manage and enhance operations and management processes to provide an effective and efficient work environment that enables the execution of the BNL mission in a manner responsive to customer and stakeholder expectations.*

In FY03, the relative weights of the Critical Outcomes reflect a high priority on the success of the Laboratory's science and technology mission and the need for continued improvement and focus on the Laboratory's environmental cleanup activities. At the Objective level, the FY03 priorities clearly reflect an increased emphasis on BSA's self-assessment program while maintaining a balanced perspective of institutional performance consistent with SC expectations.

The Critical Outcomes, Objectives, and Measures, and their relative weights, are:

Critical Outcomes, Objectives, and Measures	Element %	Measure %	Objective %	Outcome %
1.0 Excellence in Science & Technology				**60%**
Objective 1.1 Research Quality			35%	
Objective 1.2 Relevance to DOE Missions			10%	
Objective 1.3 Constructing & Operating Facilities			30%	
Objective 1.4 Research Program Management			25%	
2.0 Environmental Management				**8%**
Objective 2.1 Operational Excellence in Environmental Restoration			15%	
Measure 2.1.1 Project Completion and Other Key Milestones		100%		
Objective 2.2 Execution of Program Activities			80%	
Measure 2.2.1 Fiscal Year Cost Performance		25%		
Measure 2.2.2 Total Program Cost Management		35%		
Measure 2.2.3 Critical Path Schedule Performance		20%		
Measure 2.2.4 Overall Program Schedule Performance		20%		
Objective 2.3 High Flux Beam Reactor			5%	
3.0 Laboratory Management and Operations				**32%**
Objective 3.1 Management and Business Processes			55%	

Measure 3.1.1 Corporate Leadership		32%	
3.1.1.1 Establishing Partnerships	28%		
3.1.1.2 Corporate Involvement	72%		
Measure 3.1.2 Procurement		23%	
3.1.2.1 Deliver Effective Procurement Packages to DOE-BAO	30%		
3.1.2.2 Maximize Procurement Quality	70%		
Measure 3.1.3 Baseline Study of Lab Business Systems		18%	
Measure 3.1.4 Cyber Security		27%	
Element 1	25%		
Element 2	25%		
Element 3	25%		
Element 4	25%		
Objective 3.2 Assessments & Improvements			15%
Measure 3.2.1 Management Systems Assessment Program		100%	
3.2.1.1 Management System Objectives & Assessment Activities	20%		
3.2.1.2 Consensus-based User/Peer Reviewer Maturity Determinations	30%		
3.2.1.3 Third Party Evaluation of the Management System Assessment Program	50%		
Objective 3.3 Environment, Safety, and Health			10%
Measure 3.3.1 Legacy ES&H Risk Management		38%	
3.3.1.1 Site Hazard Footprint Management	100%		
Measure 3.3.2 Ongoing ES&H Risk Management		62%	
3.3.2.1 Pollution Prevention	50%		
3.3.2.2 OSHA Reportable Injury Management	0%		
3.3.2.3 Radiological Source Inventory Database	50%		
Objective 3.4 Site Infrastructure, Facilities & Operations			10%
Measure 3.4.1 Pursue Alternative Financing (AF) for Infrastructure Projects		25%	
3.4.1.1 BNL Housing Reconstruction	67%		
3.4.1.2. Energy Science Building	33%		
Measure 3.4.2 Project Management		50%	
Measure 3.4.3 Facilities/Infrastructure Maintenance		25%	
3.4.3.1 Infrastructure Reliability Index (RI)	100%		
Objective 3.5 Communications and Trust			10%
Measure 3.5.1 Building National Recognition		40%	
Measure 3.5.2 Stakeholder Involvement & Understanding		40%	
Measure 3.5.3. Employee Communications Program		20%	

Combined, the Critical Outcomes, Objectives, and Measures define the scope of planned institutional level self-assessment activities. This approach ensures that priorities and resources associated with institutional assessment activities supporting Critical Outcomes and Objectives are considered and balanced with the development of the specific measures and metrics contained in the Critical Outcome Trees.

The Critical Outcomes, Objectives, and Performance Measures agreed to for FY03 through the DOE/BSA Critical Outcome process are fully defined in Attachment 1 to this Appendix.

VIII. Schedule

In order to clearly define the path forward, the following generic schedule is presented as a guide. BSA and DOE acknowledge that the nature of the processes involved demands flexibility in the schedules.

FY 2003 Performance Measures Schedule

October:

- October 1 - BSA initiates the Self-Evaluation process for the **Completed Fiscal Year**.
- Third week in October - Conduct the Fourth Quarter status review for the **Completed Fiscal Year.**

November:

- November 15 - BSA submits its Annual Self-Evaluation Report to DOE for the **Completed Fiscal Year.**

January:

- January 15 - DOE transmits its draft Annual Evaluation Report for the **Completed Fiscal Year** to BSA for comment.
- Conduct the First Quarter status review for the **Current Fiscal Year**.

February:

- February 1 - BSA submits its comments on DOE's draft Annual Evaluation Report for the **Completed Fiscal Year** to DOE.
- Second week in February - BAO transmits the final DOE Annual Evaluation Report for the **Completed Fiscal Year** to BSA.

March:

- BAO and BSA begin drafting the Critical Outcomes, Objectives, and Performance Measures for the **Succeeding Fiscal Year**.

April:

- DOE/BSA Management Retreat to assess customer strategic needs, and refine the Critical Outcomes, Objectives, and Performance Measures for the **Succeeding Fiscal Year**.
- Conduct the Mid-year (Second Quarter) status review for the **Current Fiscal Year**.

June:

- June 30 - BAO and BSA will have developed a workable draft on the Critical Outcomes, Objectives, and Performance Measures for the **Succeeding Fiscal Year**.

July:

- Conduct the Third Quarter status review for the **Current Fiscal Year**.

September:

- September 30 - The Critical Outcomes, supporting Objectives, and related Performance Measures for the **Succeeding Fiscal Year** will be ready to be incorporated into DOE's Prime Contract with BSA.

IX. Definitions and Acronyms

Activity/Functional Area - The strategic areas of mission accomplishment outlined in the Director of the Office of Science expectations for Science Laboratory's program performance in the areas of Science, Leadership, Environment, Safety & Health, Infrastructure, Business Operations, or Stakeholder Relations. These form the basis for the Laboratory's Critical Outcomes, Objectives, and Measures.

Critical Outcome - Performance end state having the highest level of strategic value or impact to DOE, BSA, or affected stakeholders; represent a sustainable target over a minimum of 3 to 5 years.

Critical Outcome Trees - The complete set of Critical Outcomes, Objectives, and Measures for a given fiscal year; synonymous with Attachment 1 to this Appendix.

Objective - A statement of desired outcomes for an organization or activity. Objectives are intended to be sustainable targets over a 1-3 year timeframe and form a complete, non-redundant set of results for evaluating progress toward achievement of the Critical Outcomes.

Measure - A quantitative or qualitative method for characterizing performance. Performance Measures are specific to the performance period, i.e., the fiscal year, and require the development of metrics (expectations) to facilitate adjectival ratings.

Metric (a.k.a. Expectation) - The desired condition or target level of performance for each measure.

Result - The actual condition or performance level for each measure.

Benchmark - A standard or point of reference for measurement, usually derived from values found in other institutions or organizations.

Outstanding - Significantly exceeds the standard of performance; achieves noteworthy results.

Excellent - Exceeds the standard of performance, although there may be room for improvement in some elements. Better performance in all other elements more than offsets this.

Good - Meets the standard of performance. Deficiencies do not substantively affect performance.

Marginal - Below the standard of performance; deficiencies are serious and may affect overall results; management attention and corrective action are required.

Unsatisfactory - Significantly below the standard of performance; deficiencies are serious, may affect overall results, and urgently require senior management attention.

Critical Outcome 1.0 Basic Science & Technology

BNL WILL DELIVER INNOVATIVE, FOREFRONT SCIENCE AND TECHNOLOGY ALIGNED WITH DOE STRATEGIC GOALS IN A SAFE, ENVIRONMENTALLY SOUND, AND EFFICIENT MANNER AND WILL CONCEIVE, DESIGN, CONSTRUCT, AND OPERATE WORLD-CLASS USER FACILITIES.

The weight of this Outcome is 60% of total.

Cognizant DOE Assistant Secretaries and Office Directors have primary responsibility for evaluating the performance of Laboratory Science and Technology programs. In carrying out this responsibility, the Assistant Secretaries and Office Directors are likely to request assistance from the Program Managers under whose jurisdiction the various individual Laboratory programs fall.

In performing this evaluation, the Assistant Secretaries and Office Directors have available input from the following sources:

1. DOE Program Managers who carry out periodic reviews of the programs they fund. These reviews usually include use of independent technical experts. The Program Managers may use written reviews as a basis for evaluating the quality of the science and technology performed by the Laboratory and its relevance to their programmatic goals.

2. The Science and Technology Advisory Committee of the BSA Board that oversees the internal reviews of science and technical programs at Brookhaven. Independent review committees whose membership is drawn from the external scientific and engineering communities review each major Laboratory program on an 18-month cycle. The committees evaluate Laboratory divisions and programs with respect to the quality and performance of the staff, the quality and timeliness of the work, and the relevance of the programs to the goals of the Laboratory and sponsoring agencies. Reviews include consideration of the Performance Measures described below. The Committees' written reports and the Laboratory's responses are made available to the BSA Board for Brookhaven, DOE Contracting Officers, and to relevant DOE Program Managers.

   In addition, input from Advisory Committees reporting to the cognizant DOE Assistant Secretary or Office Director that are appointed formally through the Federal Advisory Committee Act, from reviews of relevant Laboratory activities requested for the Secretary of Energy, or from cognizant Assistant Secretaries and Office Directors may be used.

3. BNL Self-Assessments, which include Department Self-Assessments, Independent Peer Review, and Department and Lab-level Annual Self-Evaluations.

Objective 1.1 Quality of Research

The weight of this Objective is 35%.

Reviewers will evaluate the overall quality of the research performed. Depending on the nature of the program, reviewers will consider the following:

Science: Success in producing original, creative scientific output that advances fundamental science and opens important new areas of inquiry; success in achieving sustained progress and impact on the field; and recognition from the scientific community, including awards, peer-reviewed publications, citations, and invited talks.

Technology: Whether there is a solid technical base for the work; the intrinsic technical novelty of the research; the importance of technical contributions made to the scientific and engineering knowledge base underpinning the technology program; and recognition from the technical community.

Objective 1.2 Relevance to DOE Missions and National Needs

The weight of this Objective is 10%.

Reviewers will consider whether the research fits within and advances the missions of DOE; contributes to U. S. leadership in the international scientific and technical communities; contributes to the goals and objectives of the Strategic plans of DOE and other national programs; and the extent of productive interaction with other Science and Technology programs. Depending on the nature of the program, reviewers will consider the following:

Science: The program's track record of success in making scientific discoveries of technological importance to DOE missions and U.S. industry; the degree of industrial interest in follow-on development of current research results; and the effective use of national research facilities that serve the needs of a wide variety of scientific users from industry, academia, and government laboratories.

Technology: The value of successfully developing pre-commercial technology to DOE, other federal agencies, and the national economy; the program's risks and costs; and, where appropriate, the degree of industrial interest, participation, and support.

Objective 1.3 Success in Constructing and Operating Research Facilities

The weight of this Objective is 30%.

Reviewers will consider whether the construction and commissioning of new facilities is on time and within budget; whether facility performance specifications and objectives are achieved; the reliability and safety of operations; adherence to planned schedules; and the cost-effectiveness of maintenance and facility improvements.

Reviewers will also assess the quality, innovation and achievements in designing and developing new facilities that will provide the next generation of research tools.

Reviewers of user facilities will also consider whether the user access program is effective, efficient, and user-friendly; the quality of the proposal evaluation process; the strength and diversity of user participation; the productivity of the research supported, both in science and technology; and the level of satisfaction among user groups.

Reviewers will consider the extent to which BNL provides effective and efficient leadership in the development of the Spallation Neutron Source (SNS) Project. In this project, the Laboratory will perform assigned tasks and produce scheduled deliverables for the Spallation Neutron Source in accordance with the Inter-Lab Memorandum of Agreement (MOA) and the approved annual work plans. Expectations for BNL performance in this area are reflected in the following Table.

Rating	*Criteria*
Outstanding	Deliver annual work plan elements below cost and ahead of schedule.
Excellent	Deliver annual work plan elements on cost and schedule, including up to 50% of contingency.
Good	Deliver annual work plan elements within BNL project cost and/or schedule, including greater than 50% but less than or equal to 100% of contingency.
Marginal	Delivery of annual work plan elements exceeding cost and/or schedule, including contingency, such that BNL project critical path is impacted.
Unsatisfactory	Delivery of annual work plan elements exceeding cost and/or schedule, including contingency, such that overall SNS project critical path is impacted.

Objective 1.4 Effectiveness and Efficiency of Research Program Management

The weight of this Objective is 25%.

Reviewers will consider the quality of research plans; whether technical risks are adequately considered; whether use of personnel, facilities, and equipment is optimized; success in meeting budget projections and milestones; the effectiveness of decision-making in managing and redirecting projects; success in identifying and in avoiding or overcoming technical problems; the effectiveness with which technical results are communicated to maximize the value of the research results and to gain appropriate recognition for DOE and the Laboratory; effectiveness in developing, managing, and transferring to industry intellectual property and technical know-how associated with research discoveries; and the degree to which customer and stakeholder expectations are consistently met.

Critical Outcome 2.0 Environmental Management

BSA WILL DELIVER "BEST-IN-CLASS" SOLUTIONS IN CONDUCTING THE ENVIRONMENTAL MANAGEMENT PROGRAM AND SUPPORT DOE, INCLUDING BOTH DOE-EM AND DOE-SC IN ITS BALANCED DECISION MAKING FOR ENVIRONMENTAL CLEANUP. BSA IS COMMITTED TO COMPLETING THE SUPERFUND PORTION OF THE CLEANUP BY FY 2005. THE CLEANUP WILL BE PROTECTIVE OF THE ENVIRONMENT, RISK BASED, COST EFFECTIVE, CONSISTENT WITH DOE-SC EXPECTATIONS FOR LONG-TERM STEWARDSHIP, AND PERFORMED IN AN OPEN EXCHANGE WITH THE COMMUNITY, REGULATORS, AND OTHER STAKEHOLDERS. BNL WILL CONTINUE TO KEEP THE COMMITMENTS AGREED TO IN THE MEMORANDUM OF UNDERSTANDING SIGNED BY DR. MARBURGER AND MR. HOLLAND ON MAY 4, 2001. ADDITIONALLY, BSA WILL EXECUTE THE STRATEGIC INITIATIVES OUTLINED IN THE PERFORMANCE MANAGEMENT PLAN (PMP).

The weight of this Outcome is 8% of total.

Objective 2.1 Operational Excellence in Environmental Restoration

The weight of this Objective is 15%.

BSA will incorporate operational excellence into work planning, authorization and implementation that enables projects to be completed on or ahead of schedule. Expectations for BSA are as follows: Hazards are identified and mitigations developed during work planning. Work planning authorization includes levels of coordination and management review that are appropriate to risks and impacts. BSA will use its best efforts to obtain offsite property access so as not to delay projects, and coordinate with local government agencies to ensure that permits are received in a timely manner. Projects will start on time. Incidents will be reported promptly and timely actions will be taken to resolve the problem and prevent recurrence. Waste will be managed and dispositioned in a cost effective manner. Performance will be analyzed and lessons learned applied to improve performance. Management systems in use will minimize or avoid events that could compromise safety or impact project costs and schedule. BSA's performance under this objective will be monitored and rated by Performance Measure 2.1.1.

Measure 2.1.1 Project Completions and Other Key Milestones

The weight of this Measure is 100%.

BSA will be evaluated on the quality of work planning and schedule management via the achievement of project completions and other key milestones. These key task activities directly support completion of the PMP strategic and critical path activities. The project completions, other key milestones, completion dates and completion criteria are contained in Table 1.

Performance Level Metrics:

Outstanding	14 of 15 milestones met on the dates specified in Table 1 plus one groundwater treatment system construction is completed.
Excellent	All milestones are met within 3 weeks of dates specified in Table 1.
Good	All milestones met within 4 weeks of dates specified in Table 1.
Marginal	All milestones met within 6 weeks of dates specified in Table 1.
Unsatisfactory	All milestones met within 8 weeks of dates specified in Table 1.

Conditions:

- The specified dates for the project completions may be changed via DOE and BNL's formal baseline change control proposal (BCP) procedure. Reasons for change may include need for substantial additional characterization, substantive stakeholder concerns that affect project scope and schedule, denial of property access, force majeure, etc. The change control level for these milestones are specified in the Baseline and in most cases are Level 2b and above. Level 3 changes will be made through formal changes to Appendix B.

- Accelerated FY04/05 milestones may be substituted for late FY03 milestones in a two for one ratio. (See Table 1A)

- Completion of milestones and other project completions are dependent upon FY03 funding being provided in accordance with the FY03 Work Authorization Plan (WAP).

- All milestone dates reflect currently approved Baseline and/or approved BCP dates.

Objective 2.2 Execution of Program Activities

The weight of this Objective is 80%.

BSA will expertly, expeditiously, and economically plan, conduct, and complete decontamination and decommissioning of facilities; removal and disposal of wastes; and remediation of soils and groundwater. These projects will be safely but aggressively undertaken, closely controlled, and focused on completion by FY 2005. BSA will aggressively manage cost and schedule performance within acceptable performance measures and achieve all major Interagency Agreement milestones on or before their commitment date with the regulatory agencies. BSA's performance under this objective will be monitored and rated by Performance Measures 2.2.1, 2.2.2, 2.2.3 and 2.2.4.

Measure 2.2.1 Fiscal Year Cost Performance

The weight of this Measure is 25%.

BSA will be evaluated on its cost effective performance management of the baseline for FY 2003.
Cost Performance Index = (Budgeted Cost of Work Performed)/(Actual Cost of Work Performed)

Performance Level Metrics:

Outstanding	CPI $\geq$ 1.03
Excellent	1.00 < CPI < 1.03
Good	0.85 < CPI $\leq$ 1.00
Marginal	0.75 < CPI $\leq$ 0.85
Unsatisfactory	CPI $\leq$ 0.75

Conditions:

- This measure is intended to assess FY03 cost performance for cleanup work performed by BSA. In analyzing BSA's performance against this measure, appropriate adjustments will be made to ensure that FY03 expenditures (ACWP) are compared directly against FY03 earned value, hence facilitating a fair and accurate assessment of BSA's cost performance for the fiscal year.

- Due to extraordinary uncertainties beyond BSA's control, the above metric does not include the Peconic River or costs necessary to obtain off-site property access to install the groundwater treatment systems.

- BCWP from BCPs processed for activities performed and costed in prior years (i.e. pre-2003) and DOE-funded activities not associated with BSA's execution of the cleanup program (i.e. NYSDEC and U.S. Fish and Wildlife Service) are excluded from the calculation.

- ACWP from accruals processed for activities performed in prior years (i.e. pre-2003) and DOE- funded activities not associated with BSA's execution of the cleanup program (i.e. NYSDEC and U.S. Fish and Wildlife Service Grants) are excluded from the calculation.

- BSA will conduct a self-assessment of cost performance, which objectively and directly evaluates the actual cost of performing FY03 work against the budgeted cost of performing this same work. This assessment will be provided to the DOE within 60 days of the close of the fiscal year.

Measure 2.2.2 Total Program Cost Management

The weight of this Measure is 35%.

This measure evaluates BSA in the area of total program cost and contingency management. Contingency will continue to be applied to fund unforeseen and necessary program expenditures. However, this measure challenges BSA to manage the EM program contingency in a cost effective manner: timely and effective corrections will be taken to mitigate unfavorable cost variances, and upside opportunities will be proactively identified and implemented.

Performance Level Metrics: BSA will seek to increase the contingency percentage against the remaining scope through FY05, expressed as RCP. Remaining Contingency Percentage (RCP) = (Remaining Baseline Contingency)/(Remaining Baseline BCWS)

Outstanding	RCP $\geq$ 17%
Excellent	14% < RCP < 17%
Good	12% < RCP $\leq$ 14%
Marginal	10% < RCP $\leq$ 12%
Unsatisfactory	RCP $\leq$ 10%

Note: Remaining Baseline Contingency for years FY03-FY05 = $14,815,039 (at 10/1/02)
Remaining Baseline BCWS for years FY03-FY05 = $100,513,690 (at 10/1/02)

Measure 2.2.3 Critical Path Schedule Performance

The weight of this Measure is 20%.

Project completions, other key milestones, completion dates and completion criteria are contained in Table 2.

BSA will meet and accelerate critical path milestones to increase the confidence of achieving the FY 2005 EM Program completion date. Additionally, BSA will accelerate out-year milestones to demonstrate superior schedule performance. These are listed in Table 2A.

Performance Level Metrics:

Outstanding	All FY03 Critical Path milestones described are met on or ahead of schedule. In addition, 2 or more of the FY03 and/or the FY04/05 Critical Path Acceleration Milestones are accelerated by at least 4 weeks.
Excellent	All FY03 Critical Path milestones described are met on schedule. In addition, one of the FY03 and/or the FY04/05 Critical Path Acceleration Milestones is accelerated by at least four weeks.
Good	All Critical Path Milestones are completed on schedule.

Marginal	8 of 10 Critical Path Milestones are completed on schedule
Unsatisfactory	7 or less Critical Path Milestones are completed on schedule

Conditions:

- IAG milestone dates are subject to change through the schedule extension provisions of the IAG.
- The specified dates for critical path milestones may be changed via DOE and BNL's formal baseline change control procedure. Reasons for change may include need for substantial additional characterization, substantive stakeholder concerns that affect project scope, force majeure, etc. The change control levels for these milestones are specified in the baseline and are level 2b and above.
- All milestone dates reflect currently approved Baseline and/or approved BCP dates.

Measure 2.2.4 Overall Program Schedule Performance

The weight of this Measure is 20%.

BSA will maintain total program schedule performance in order to meet the FY 2005 Completion date. Schedule Performance Index = (Budgeted Cost of Work Performed)/(Budgeted Cost of Work Scheduled)

Performance Level Metrics:

Outstanding	SPI $\geq$ 1.03
Excellent	1.00 <SPI < 1.03
Good	0.85 < SPI $\leq$ 1.00
Marginal	0.75 < SPI $\leq$ 0.85
Unsatisfactory	SPI $\leq$ 0.75

Conditions:

- This measure is intended to assess FY03 schedule performance for cleanup work performed by BSA. In analyzing BSA's performance against this measure, appropriate adjustments will be made to ensure that FY03 earned value is compared directly against FY03 BCWS, hence facilitating a fair and accurate assessment of BSA's schedule performance for the fiscal year.
- BSA will conduct a self-assessment of schedule performance, which objectively and directly evaluates FY03 earned value against BCWS. This assessment will be provided to the DOE within 60 days of the close of the fiscal year.

Objective 2.3 High Flux Beam Reactor

The weight of this objective is 5%.

Performance Level Metrics:

BSA will be evaluated on the quality of work planning and schedule management via the achievement of project completions and other key milestones. These key task activities directly support completion of the PMP strategic and critical path activities. The project completions, other key milestones, completion dates and completion criteria are contained in Table 3.

Outstanding	All FY03 milestones met within 4 weeks of dates specified in Table 3.
Excellent	7 of 8 FY03 milestones met within 4 weeks of dates specified in Table 1 and no single milestone later than 6 weeks of dates specified in Table 3.
Good	6 of 8 FY03 milestones met within 4 weeks of dates specified in Table 1 and no single milestone later than 8 weeks of dates specified in Table 3.
Marginal	5 of 8 FY03 milestones met within 4 weeks of dates specified in Table 1 and no single milestone later than 12 weeks of dates specified in Table 3.
Unsatisfactory	N/A

BSA will provide a cost effective surveillance and maintenance program for the High Flux Beam Reactor (HFBR) and support DOE in its planning and decision making processes for its decontamination and decommissioning. The activities described in Table 3 will be completed as per the metrics above.

Table 1: FY 2003 Key Activities and Project Completions

Activity Code	Milestone	Date	Completion Criteria
TBD	Surface Group Complete Remedy Reviews in Support of the EM Standdown.	01-Apr-03	Conduct a comprehensive review of the remaining surface projects. Evaluate the scope, schedule, and cost assumptions in the Baseline. Identify the drivers from the OU I ROD for performing the work and evaluate the existing need to perform the work and the value added. Submit a Letter Report to BAO documenting the results.
TBD	Groundwater Off-Site Treatment system value Engineering Complete	30-Jan-03	Complete value engineering for the six off-site groundwater treatment systems in order to reduce construction costs from previous FY02 engineering estimates - submit Letter Report. Summary of the results submitted to BAO.
050462A	OU V – Submit (draft) STP Closeout Report to DOE for Review	03-Mar-03	STP clean-up objectives specified in the STP ROD have been met, ORISE has completed sampling. The draft report is submitted to DOE for review.
O50463	OU V – Submit (draft) STP Closeout Report to DOE for Submittal to EPA/DEC	31-Mar-03	STP clean-up objectives specified in the STP ROD have been met, ORISE has completed sampling and submitted preliminary data report to BNL and BNL has incorporated preliminary ORISE data into the draft Closeout Report. Submit to DOE for transmittal to EPA/DEC.
TBD	Groundwater – Complete integration of groundwater data at BGRR	02-Jul-03	Review and summarize all existing (as of 12/31/02) groundwater monitoring data collected by the Groundwater Group and the BGRR Reactor Group into one document. This integrated data will be used during the preparation of the Pre-Design Characterization Work Plan. Data summary is submitted to BAO.
TBD	Groundwater Complete Remedy Reviews in Support of the EM Standdown	14-Mar-03	Conduct a comprehensive review of the remaining groundwater projects. Evaluate the scope, schedule, and cost assumptions in the Baseline. Identify the drivers from the OU III ROD for performing the work and evaluate the existing need to perform the work and the value added. Submit a Letter Report to BAO documenting the results.
BGPB88H	BGRR – Submit Draft 701 Interior Char Rept to DOE	18-Dec-02	Draft document has been reviewed by BNL, comments have been resolved, and the document has been submitted to DOE for review and comment.
BGPB92	BGRR –Submit Blw 701/702/RS Char Rpt to DOE	27-Jan-03	Draft document has been reviewed by BNL, comments have been resolved, and the document has been submitted to DOE for review and comment.

BGPB95	BGRR –Submit Blw 701/702/RS Char Rpt to DOE for Submittal to Regs	28-Mar-03	Document has been reviewed by BNL and DOE, comments have been resolved. BSA has submitted the document to DOE.
BGBG0155	BGRR – Filter Removal Complete	23-Sep-03	-L3-Per BCP 03-01. Filter media has been removed from the BGRR Below Ground Ducts, placed in waste disposal containers, and removed from the BGRR facility.
BGDB0145	BGRR Duct Service Building Complete	19-May-03	The Duct Service Building is constructed, electrical service lighting installed, and the Gantry crane is installed and operable.
N/A	Removal of High Activity wastes and Sources from the Igloo	31- Jan-03	Physical removal of Co, Sr, AmBe and Cs sources and 1-95 vault from old HWMF and transferred to Bldg 865.
N/A	Downgrade of Boneyard Facility	31-Jan-03	Submit request to DOE to downgrade facility including Unresolved Safety Questions.
N/A	Disposal/Removal of Boneyard Wastes at ATG and Oak Ridge	30-Sep-03	All remaining Boneyard wastes are physically removed from ATG and Oak Ridge. Shipment to Envirocare or Hanford has occurred.
N/A	Disposal of Cobalt and Strontium Sources	30-Jul-03	Remaining Sr and Co sources have been shipped to Hanford.

Table 1A: Acceleration Milestones

Activity Code	Milestone	Date	Completion Criteria
O3A0535	OU III - Airport System Construction Complete	24-Dec-03	Reflects approved BCP 03-03 date. Construction is complete except for remaining punch list items. All extraction wells, pumps, piping, treatment equipment, buildings, instrumentation, and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
011032	OU I - Submit Draft Chem Holes Closeout Rpt to DOE.	09-Feb-04	Draft document has been reviewed by BNL, comments have been resolved, and the document has been submitted to DOE for review and comment.
O11033	OU I - Submit Draft Chem Holes Closeout Rpt to DOE for Submittal to EPA/DEC	02-Mar-04	Surface soil clean-up objectives have been met and a draft Closeout Report has been submitted to DOE for EPA/DEC review.
011033A	OU I - Submit (draft) Meadow Marsh Completion Report to DOE	28-May-04	Draft document has been reviewed by BNL, comments have been resolved, and the document has been submitted to DOE for review and comment.
O11103B	OU I - Submit (draft) Meadow Marsh Completion Report to DOE for Submittal to EPA/DEC	21-Jun-04	Sediment and soil clean-up objectives have been met and a draft Closeout Report has been submitted to DOE for EPA/DEC review.

010463	OU I - Submit draft Bldg 811 Soils Completion Rept to DOE	09-Oct-04	Draft document has been reviewed by BNL, comments have been resolved, and the document has been submitted to DOE for review and comment.
O10543	OU I - Submit draft Bldg 811 Soils Completion Rept to DOE for Submittal to EPA/DEC	02-Nov-04	Soil clean-up objectives have been met, ORISE has had 30 days to review the report and provide comments, BNL has had 30 days to incorporate comments and submittal of the draft Closeout Report to DOE for EPA/DEC review.
O11088	OU I Meadow Marsh Remediation Start	30-Jan-04	Technical work plans to control field activities have been approved for use and work to support remediation has commenced.
O11060	OU I – Ash Pit Soil Cap Start	17-Feb-04	Technical work plans to control field activities have been approved for use and work to support remediation has commenced.
011072	OU I – Submit Ash Pit draft Closeout Report to DOE	11-May-04	The soil cap has been installed and the draft Closeout Report is submitted to DOE for review and comment.
O11072A	OU I – Submit Ash Pit draft Closeout Report to DOE for Submittal to EPA/DEC	04-Jun-04	The soil cap has been installed and the draft Closeout Report is submitted to DOE for EPA/DEC review.
03N0535	OU III North Street System Construction Complete	07-Oct-03	Construction is complete except for remaining punch list items. All extraction wells, pumps piping, treatment equipment, buildings instrumentation, and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
O3NE386N6	OU III North Street East System Construction Complete	05-Nov-03	Construction is complete except for remaining punch list items. All extraction wells, pumps piping, treatment equipment, buildings instrumentation, and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
O3P0535	OU III – Construction Complete Industrial Park East	05-Dec-03	Construction is complete except for remaining punch list items. All extraction wells, pumps piping, treatment equipment, buildings instrumentation, and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.

Table 2: FY 2003 Critical Path Milestones

Activity Code	Milestone	Date	Completion Criteria
O10253	OU I Submit HWMF Soil Draft RA Work Plan to DOE for Submittal to EPA/DEC	07-Mar-03	Submit the draft RAWP to DOE for transmittal to EPA/DEC. The draft RAWP will include the project strategy. As determined in the Remedy Review, the remedial design will require revisions and will be submitted for DOE/regulatory review. A schedule will be included in the RAWP.
O10466	OU I Former HWMF Bldgs. D&D Start	02-May-03	Technical work plans to control field work have been approved for use and work to support D&D of buildings that are determined to have no future use has commenced. Completion letter submitted to DOE.
O3S9431	OU III – Submit Sr-90 Draft Char Work Plan to BNL/DOE	02-Jul-03	The Plan includes the integration of existing (as of 12/31/02) groundwater monitoring data collected by the Groundwater Group and the BGRR Reactor Group. Sr-90 draft Characterization Work Plan submitted to DOE.
O3S9435	OU III – Submit Sr-90 Characterization WP to DOE for Submittal to EPA/DEC for WCF/PFS	04-Aug-03	The Plan incorporates comments received from DOE on the previous draft. Sr-90 draft Characterization Work Plan submitted to DOE for transmittal to EPA/DEC.
050583A	Submit Draft Peconic River ROD w/o RS to DOE for Review.	13-Feb-03	Per 15 – January-03 IAG Milestone Extension Request and trend and BCP pending per February 5, 2003 regulator meeting. Draft ROD w/o RS will include draft strategy for Peconic River cleanup. It will incorporate IAG comments on remedial strategy from February 5, 2003 proposed plan strategy meeting, early DOE comments on proposed strategy and stakeholder input from Peconic River Working Group. It will also include a summary of Peconic River characterizations (including fish biomass study and surface water level predictions), risk assessments and pilot studies.
050607	Submit Draft Peconic River ROD w/o RS to DOE for Submittal to EPA/DEC	06-Mar-03	Per 15 – January-03 IAG Milestone Extension Request and trend and BCP pending per February 5, 2003 regulator meeting. Draft ROD w/o RS will include draft strategy for Peconic River cleanup. It will incorporate IAG comments on remedial strategy from February 5, 2003 proposed plan strategy meeting, early DOE comments on proposed strategy and stakeholder input from Peconic River Working Group. It will also include a summary of Peconic River characterizations (including fish biomass study and surface water level predictions), risk assessments and pilot studies as well as incorporating DOE comments on draft ROD w/o RS.

050599	Submit Draft Peconic River ROD w RS to DOE for Review and Comment.	12-May-03	Per 15 – January-03 IAG Milestone Extension Request and trend and BCP pending per February 5, 2003 regulator meeting. Draft ROD w/o RS will include draft strategy for Peconic River cleanup. It will incorporate IAG comments on remedial strategy from February 5, 2003 proposed plan strategy meeting, DOE comments on proposed strategy and stakeholder input from Peconic River Working Group. It will also include a summary of Peconic river characterizations (including fish biomass study and surface water level predictions), risk assessments and pilot studies.
050595A	Submit Draft Peconic River ROD w RS to DOE for Submittal to EPA/DEC	12-Jun-03	Per 15 – January-03 IAG Milestone Extension Request and trend and BCP pending per February 5, 2003 regulator meeting. Draft ROD w/RS will include draft strategy for Peconic River cleanup. It will incorporate IAG comments on remedial strategy from February 5, 2003 proposed plan strategy meeting, DOE comments on proposed strategy and stakeholder input from Peconic River Working Group. It will also include a summary of Peconic river characterizations (including fish biomass study and surface water level predictions), risk assessments and pilot studies as well as incorporating DOE comments on draft ROD w/RS.
BGPA15B1	BGRR – Submit Draft FS Rpt to DOE for review	22-Jul-03	The scope of the remedial action is determined; BGRR Feasibility Study is prepared per CERCLA guidance and draft report is submitted to BAO.
BGPA18B1	BGRR – Submit Draft PRAP Rpt to DOE for review	22-Jul-03	A BGRR PRAP is prepared per CERCLA guidance documents and submitted to BAO.
BGPA16B	BGRR – Submit Draft FS Rpt to DOE for Submittal to EPA/DEC	22-Sep-03	BNL/DOE comments on the draft BGRR FS Report are addressed; comments incorporated, and revised draft FS Report submitted to BAO for their transmittal to EPA/DEC.
BGPA19B	BGRR – DOE Submit Draft PRAP To DOE for Submittal to EPA/DEC	22-Sep-03	BNL/DOE comments on the draft PRAP are addressed; comments incorporated, and revised draft PRAP submitted to BAO for their transmittal to EPA/DEC.

Table 2A: Acceleration Milestones

Activity Code	Milestone	Date	Completion Criteria
010357	OU I - Submit HWMF D&D Closeout Report to DOE	25-Nov-03	BNL has determined which buildings have a future use and those buildings will have been decontaminated, as necessary. Buildings that do not have a future use are demolished. The draft Closeout Report is submitted to DOE for review.
O10358	OU I - Submit HWMF D&D Closeout Report to DOE for Submittal to EPA/DEC	16-Dec-03	BNL has determined which buildings have a future use and those buildings will have been decontaminated, as necessary. Buildings that do not have a future use are demolished. The draft Closeout Report is submitted to DOE for EPA/DEC review.
O10454	OU I Former HWMF Soils and Wetland Remediation Start	21-Jan-04	Technical work plans to control field work have been approved for use and work to support D&D of buildings that are determined to have no future use has commenced.
10469	OU I Submit Draft HWMF Soils Closeout Report to DOE	07-May-05	Soil clean-up objectives have been met, ORISE has had 30 days to review the report and provide comments, BNL has had 30 days to incorporate comments and submit Closeout Report to DOE for review.
O10470	OU I Submit HWMF Soils Closeout Report to DOE for Submittal to EPA/DEC	07-Jun-05	Soil clean-up objectives have been met, ORISE has had 30 days to review the report and provide comments, BNL has had 30 days to incorporate comments and submittal of the draft Closeout Report to DOE for EPA/DEC review.
O3S9095	OU III – Submit Sr-90 (draft) Pilot Study Report to BNL/DOE	10-Nov-03	Draft Sr-90 Chemical Holes Pilot Study report submitted to DOE.
O3S9396	OU III – Submit (draft) Sr-90 pilot Study Report to DOE for Submittal to EPA/DEC	29-Dec-03	The Report incorporates comments received from DOE on the previous draft. Draft Sr-90 Chemical Holes Pilot Study report submitted to DOE for transmittal to EPA/DEC.
050338	OU V- Submit Draft Peconic RA Work Plan to DOE for Review and Comment	08-Feb-04	Date pending BCP and ROD. Work Plan will be completed and based on cleanup goals specified in DOE approved draft Record of Decision and remediation areas refined per preliminary methyl mercury survey data, and submitted to DOE. Draft RAWP submitted to DOE for review and comment.
O50323	OU V- Submit Draft Peconic RA Work Plan to DOE for Submittal to EPA/DEC	23-Mar-04	Date pending BCP and ROD. Work Plan will be completed and based on cleanup goals specified in DOE approved draft Record of Decision and remediation areas refined per preliminary methyl mercury survey data, and submitted to DOE. DOE's draft RAWP comments received and incorporated and revised document submitted to DOE.

O50371	OU V - Submit PR 30 % Design to DOE(BNL) for Review &Comment.	12-Jan-04	Date pending BCP and ROD. Submit 30% design to DOE for review and comment will include cleanup goals per ROD with Responsiveness Summary and refined remediation areas based on final methyl mercury sampling data. Will incorporate necessary modifications to design strategy per DOE and IAG comments on RD Work Plan.
O50341	OU V - Submit PR 90% Design to DOE for Submittal to EPA/DEC	24-Mar-04	Date pending BCP and ROD. Submit 90% Remedial Design to DOE for submittal to EPA and DEC. Will incorporate revisions based on DOE 30% Design comments, early input regulatory comments based on briefings to IAG and stakeholders.
03S9452	Submit Sr-90 30% Design to BNL/DOE	28-Jan-04	Sr-90 30% Design submitted to DOE.
03S9460	Submit Sr-90 30% Design to DOE for Submittal to EPA/DEC	26-Feb-04	The design incorporates comments received from DOE on the previous draft. Sr-90 30% Design to be submitted to DOE for transmittal to EPA/DEC.
03S9472	Submit Sr-90 90% Design to BNL/DOE	08-Apr-04	Sr-90 90% Design submitted to DOE.
03S9480	Submit Sr-90 90% Design to DOE for Submittal to EPA/DEC	06-May-04	The design incorporates comments, if any, received from EPA/DEC on the 30% design. Sr-90 90% Design to be submitted to DOE for transmittal to EPA/DEC.
03S9497	Submit Sr-90 RA Work Plan to DOE	18-Jun-04	Submittal of Sr-90 draft RAWP to DOE for review. Included is the final design and schedule for construction.
0359505	Submit Sr-90 RA Work Plan to DOE for Submittal to EPA/DEC	19-Jul-04	Submittal of Sr-90 draft RAWP to DOE for transmittal to EPA/DEC. The RAWP incorporates comments from DOE on the draft. Included is the final design and schedule for construction.

Table 3: HFBR Key Milestone and Activities

Activity Code	Milestone	Date	Completion Criteria
TBD	Complete FY03 Surveillance and Maintenance Activities	30-Sep-03	Complete minimal S&M activities as per tickler cards, revised frequencies of inspection and maintenance, etc., in accordance with WBS 1.1.
TBD	Prepare Scope, Cost and Schedule Package for "Risk Reduction" End-state Alternative	28-Feb-03	Draft cost and schedule estimate for "Risk Reduction" Planning Case submitted to DOE
TBD	Primary Vessel Lay-up Completed	31-Jul-03	Vessel water drained and disposed.
TBD	Dispose of Stabilization Waste	31-Jan-03	Transportation to and receipt of waste at the disposal site.
TBD	Dispose of North Truck Lock Waste	31-Jan-03	Transportation to and receipt of waste at the disposal site.
TBD	Dispose of 20,000 # Lead	31-Dec-02	Transportation to and receipt of waste at the disposal site.
TBD	Submit PDRI (self-assessment) to DOE	31-Jan-03	Self-assessment matrix and supporting documentation. Submitted to BAO
TBD	Submit Draft PA/SI to DOE	28-Feb-03	Draft PA/SI report submitted to BAO.

Critical Outcome 3.0 Laboratory Management and Operations

BNL WILL MANAGE AND ENHANCE OPERATIONS AND MANAGEMENT PROCESSES TO PROVIDE AN EFFECTIVE AND EFFICIENT WORK ENVIRONMENT THAT ENABLES THE EXECUTION OF THE BNL MISSION IN A MANNER RESPONSIVE TO CUSTOMER AND STAKEHOLDER EXPECTATIONS.

The weight of this Outcome is 32% of total.

Objective 3.1 Management and Business Processes

The weight of this Objective is 55% of total.

BSA will develop, implement, evaluate, and improve management tools and processes to attract, hire and retain a highly qualified and diverse workforce and enable the workforce to effectively and efficiently support the Laboratory scientific and cleanup missions.

Measure 3.1.1 Corporate Leadership

The weight of this measure is 32%.

3.1.1.1 Establishing Partnerships

Brookhaven Science Associates will establish partnerships with non-DOE entities to enhance research programs.

The weight of this measure is 28%.

Performance Metric

BSA corporate involvement leads to successfully entering into substantial partnerships (*) that result in sponsorship or enhanced financing from non-DOE entities to support research programs at the Laboratory.

Rating	*Criteria*
Outstanding	Development of a strategic plan for the BSA partners and the core universities to develop and sustain new partnerships that lead to enhanced non-DOE funding of research programs at BNL and establishment of multiple substantial MOUs/Letters of Intent with non-DOE entities that have the potential to sponsor substantial programs/activities at the Laboratory.
Excellent	Development of a strategic plan for the BSA partners and the core universities to develop and sustain new partnerships that lead to enhanced non-DOE funding of research programs at BNL and establish a substantial MOU/Letter of Intent with a non-DOE entity that has the potential to sponsor a substantial program/activity at the Laboratory.
Good	Development of a strategic plan for the BSA partners and the core universities to develop and sustain new partnerships that lead to enhanced non-DOE funding of research programs at BNL.
Marginal/Unsatisfactory	No strategic plan or MOU/Letter of Intent established.

* - Substantial partnerships are $200,000 and above.

3.1.1.2 Corporate Involvement

Brookhaven Science Associates believes that active corporate involvement is a critical success factor in the management of BNL. To implement this, BSA is committed to the following types of activities at BNL:

The weight of this measure is 72%.

1. Returning a substantial amount of the funds collected by BSA as fee on this Contract to enhance the scientific position, prestige, and viability of BNL as a Department of Energy National Laboratory.
2. Providing highly skilled candidates for senior management positions at the Laboratory.
3. Providing proven management systems and processes for enhancing business operations.
4. Facilitating the implementation of these with long-term assignments of key leaders and short-term assignments of subject matter experts.
5. Conducting management assessments in various areas of Laboratory operations.
6. Providing strategic guidance on science, technology, cleanup missions, and appropriate management and administrative matters resulting in cost savings (e.g. fringe benefits).
7. Facilitating the exchange of ideas and practices between other organizations affiliated with BSA corporate partners that bring benefits to DOE and/or BNL (e.g. joint appointments with universities).

Performance Metric

Performance relative to each item will be determined as acceptable or unacceptable by BAO management with input from BSA. Performance related to the measure, as a whole, will be determined as follows:

Rating	*Criteria*
Outstanding	All 7 items determined acceptable.
Excellent	6 of the 7 items determined acceptable.
Good	5 of the 7 items determined acceptable.
Marginal	4 of the 7 items determined acceptable.
Unsatisfactory	3 or less of the 7 items determined acceptable.

Measure 3.1.2 Procurement

The weight of this measure is 23%

3.1.2.1 Deliver Effective Procurement Packages to DOE-BAO for procurements that require DOE approval and/or consent.

The weight of this element is 30%.

Performance Metric

Rating	*Criteria*
Outstanding	$\geq$ 95% of packages submitted are effective
Excellent	90 - 94.9% of packages submitted are effective
Good	85 – 89.9% of packages submitted are effective
Marginal	80 – 84.9% of packages submitted are effective
Unsatisfactory	< 80% of packages submitted are effective

"Effective" packages are those which meet the requirements of the prime contract or contain rationale acceptable to DOE for deviating from prime contract requirements.

3.1.2.2 **Maximize Procurement Quality Through Implementation of the Following Procurement Initiatives:**

The weight of this element is 70%.

1. Improve Procurement Planning to Ensure Timely Placement of Major Procurements in Accordance with the Prime Contract and Procurement and Property Management (PPM) Procurement Operations Manual

Approach: Establish two integrated procurement-planning teams to provide effective assistance, support and coordination for one department and one support division that have significant procurement activities.

Deployment:

1. Under the chairmanship of a procurement manager/supervisor, assign a buyer/contract specialist, the assistant contract administration specialist, procurement quality engineer, and department/division representatives (technical and administrative) to identify, support, monitor and coordinate procurement activities.
2. Develop a comprehensive procurement strategy.
3. The buyer/contract specialist will assist technical team members in finalizing SOWs and will develop procurement milestones that support programmatic needs.
4. The Procurement Quality Engineer (PQE) will assist in the review of SOWs/Requisitions for quality requirements. The PQE will assist in the development and qualification of potential suppliers with respect to specific quality requirements (e.g. review supplier capabilities and/or systems).
5. The Assistant Contract Administration Specialist will monitor contracts/purchase orders to ensure timely performance and receipt of deliverables and inform the other team members of a contractor's failure to perform.

Results: Conduct a satisfaction survey of procurement-planning team members to determine effectiveness of the process, and document cases of success that occurred as a result of this effort.

2. Improve Procurement Qualities by Providing More Effective Tools for the Procurement Staff

Approach: Develop standardized contract templates and improved checklists.

Deployment:

1. PPM supervisors will develop standardized contract templates for all contract types.
2. PPM supervisors will develop improved checklists.
3. Implement and provide instruction to Buyers/Contract Specialists.

Results: Improved quality as demonstrated in self-assessment compliance reviews.

3. Effective Development and Implementation of a Supplier Qualification/Performance System

Approach: Improve existing supplier-related practices and procedures (as outlined in SBMS) including adding controls and developing new error-proof processes as required to reduce variability and mitigate risks in the selection, control and improvement of the supplier base. Utilize existing PeopleSoft capabilities and develop/implement web-based information systems as needed, to allow for lab-wide sharing of information and results to enhance decision-making.

Deployment:

Establish a formal Supplier Qualification and Performance-Monitoring System, commensurate with the importance of the purchased item or service, to ensure:
1. Performance and schedule capabilities of prospective suppliers are evaluated.
2. The best-value supplier is selected (qualified).
3. The addition of new suppliers to the database is controlled and the socio-economic classification is accurate.
4. Qualified supplier's performance is monitored, evaluated and reported periodically to ensure that supplied items or services are meeting quality, cost and schedule requirements.

Results: A rating system will be deployed lab-wide that will rank major suppliers / subcontractors based on quality, cost and schedule performance.

4. Develop and Implement Phase II of the Contract Administration Improvement Plan.

Approach: Develop a plan to improve contract administration as performed by the department/division contract administration representatives, technical representatives and the buyers/contract specialists.

Deployment:

1. Implement PPM matrix authority over contract administration representatives in their progress surveillance, receipt of deliverable documentation, invoice approval and contract closeout activities.
2. Implement recertification training for technical representatives.
3. Implement periodic surveillance of Buyers/Contract Specialists contract administration responsibilities.

Results: Results of self-assessment compliance reviews

Performance Metric

Rating	*Criteria*
Outstanding	Implementation of all 4 tasks
Excellent	Implementation of 3 tasks
Good	Implementation of 2 tasks
Marginal	Implementation of 1 tasks
Unsatisfactory	Implementation of 0 tasks

Measure 3.1.3 Baseline Study of Laboratory's Business Management System

The weight of this measure is 18%.

Purpose and Background

BSA seeks to continuously improve the Laboratory's Business Management Systems. In FY2002 BSA began a process of examining the feasibility of comparing BNL business systems and processes to those of best-in-class organizations. This feasibility study concluded that there exists a set of metrics that could be used to make sensible comparisons for various business systems. In FY 2002 a list of potential key Business Management Systems indicators was identified which could assist in evaluating the ongoing effectiveness and efficiency of the Laboratory business-related Management Systems. In FY2003 BSA will advance the work performed in FY2002 by selecting a number of management systems and determining whether the indicators identified in FY2002 are comprehensive and adequate for comparison to best-in-class organizations. To the extent practicable, BNL will utilize the services of a professional organization,

recognized as an expert in the field of business systems measurement, to assist in developing the appropriate set of indicators.

Measure

BSA and DOE will partner to develop the sets of indicators that can be used for examining the effectiveness of those Business Management Systems identified in the Baseline/Benchmarking feasibility study of FY 2002 and to compare BNL systems to best in class.

Performance Metric

Rating	*Criteria*
Outstanding	Indicators are fully developed and actual Benchmarking Study has been initiated
Excellent	Indicators are fully developed and actual Benchmarking Study is partially initiated
Good	Indicators are fully developed and actual Benchmarking Study is ready for initiation in FY2004
Marginal	Indicators are not fully developed
Unsatisfactory	No progress beyond FY2002 effort has been made

Measure 3.1.4 Cyber Security

The weight of this Measure is 27%.

Each element of the Performance Measure will be awarded points based on specific accomplishments, as described below. The evaluation of the Performance Measure will be the numerical average of the scores of the supporting metrics for each of the major elements.

Purpose and Supporting Information

BNL's goal is to achieve a sustainable plateau in its Cyber Security Program where the following hold true:

- All open audit findings have been addressed and assured through implementation of Corrective Action Plans.
- The Cyber Security Program is in place and functioning effectively with the active participation of Line Management in developing and implementing the Cyber Security Program Plan.
- Through the application of formal risk analysis, an appropriate and sustainable balance between the openness required by the science mission and the security required to adequately protect the Laboratory's assets is achieved.
- Processes are in place to ensure that all sensitive country foreign nationals and 90% of non-sensitive country foreign nationals, granted access to sensitive and/or critical site systems (other than publicly available systems), have documented approval for cyber access based on the requirements indicated below (see element #4).

This achievement will reflect a new maturity in BNL's Cyber Security Program – an approach that is proactive, preventative, forward thinking and sustainable.

Elements of this measure are:

1. BNL will establish and sustain an administrative program for computer systems to ensure that all devices connected to the network are registered as authorized machines. The Laboratory also will maintain an acceptable level of security readiness defined by the most current guidance on security vulnerabilities and configuration published by Cyber Security.

   A. ITD will administer an effective network-registration program that will ensure BNL has authorized all systems connected to the network. ITD will continue a process to ensure that unregistered devices can be located quickly, so that their connection to the network can be terminated, if necessary.

The weight of element 1A is 10%.

Metrics

Rating	*Criteria*
Outstanding	<3% of active devices on the network are unregistered
Excellent	<5% of active devices on the network are unregistered
Good	<7% of active devices on the network are unregistered
Marginal	<9% of active devices on the network are unregistered
Unsatisfactory	≥ 9% of active devices on the network are unregistered

B. ITD will administer an effective internal and external computer-scanning program to measure the security posture of devices connected to the network, and will report the results to the field quarterly. Devices exempt from internal scanning for operational reasons (e.g., highly sensitive control devices) will be tracked and scanned manually to ensure that maximum security is achieved and maintained within the context of the mission's requirement.

The weight of element 1B is 15%.

The measure of this element *taken as a quarterly time period* is as follows:

Metrics

Rating	*Criteria*
Outstanding	>90% of devices are scanned
Excellent	>80% of devices are scanned
Good	>70% of devices are scanned
Marginal	>60% of devices are scanned
Unsatisfactory	≤60% of devices are scanned

2. Cyber Security will design, develop and implement an Internal Intrusion Detection Program to carry out meaningful assessments and analyses of threats and risks for the Laboratory. Such assessments are essential effective performance measures for a fully rounded, mature program – and to provide the data required for improving and adjusting priorities to best deploy our limited resources.

A. Cyber Security will complete the design of an Internal Intrusion Detection System (IIDS) capability - documented with a network diagram and supporting text. The implementation team will evaluate, test, and deploy an Internal IDS capability, consisting of one sensor that listens and returns data alerts to a centrally located IDS console. The IDS team will determine methodology for analyzing the output from the internal IDS sensors; the results will be given to Management in routine reports reflecting internal risk.

   The weight of this element is 25%

The measure of this element is as follows:

Metrics

Rating	*Criteria*
Outstanding	IIDS test configuration up and running, fully documented; routine reports generated by 08/15/03.
Excellent	IIDS test configuration up and running; fully documented, reports under development.
Good	IIDS documented, test configuration working, no progress on report generation.
Marginal	IIDS documented, test configuration working, but not fully tuned, e.g. false positives not yet tuned to an acceptable level.
Unsatisfactory	No progress

3. ITD will assess risks and analyze threats to determine the appropriate security actions for "critical" or "sensitive" computer systems at Brookhaven.

Together with the system owners, Cyber Security will identify "critical" or "sensitive" systems. ITD then will ensure that a security review is made for each critical or sensitive system and that the appropriate level of protection is applied to it.

The weight of this element is 25%

The measure of this element is as follows:

Metrics

Rating	*Criteria*
Outstanding	Critical and sensitive systems identified; 90% - 100% of the security reviews are undertaken and protection levels applied.
Excellent	Critical and sensitive systems identified; 75% - 89% of security reviews undertaken and protection levels applied.
Good	Critical and sensitive systems identified, 50% - 74% of security reviews undertaken and protection levels applied.
Marginal	Critical and sensitive systems identified and security reviews undertaken. No protection applied.
Unsatisfactory	No progress

4. BNL will develop and maintain a security process for regulating the access of foreign nationals to the laboratory's critical and sensitive systems. BNL will implement a program that ensures that 1) a designated official approves the cyber access of foreign nationals, 2) the approval identifies the specific system(s) to which access is granted, and the anticipated period of access, 3) approvals are based on documenting an assessment of risks and identifying access controls, and, 4) access is periodically audited consistent with the risk upon which approval is based.

By the end of FY03, BNL will have developed a system to automatically gather account information that tracks foreign nationals' (on-site) access to BNL's computing resources. The process will check users currently logged into the critical and sensitive systems against both their approved times at the Laboratory, and their permission for access, as specified in the GIS.

The weight of this element is 25%.

The measure of this element is as follows:

Metrics

Rating	*Criteria*
Outstanding	Account tracking system implemented; 90% - 100% of critical and sensitive systems configured by the end of FY 03.
Excellent	Account tracking system implemented; 75% - 89% of critical and sensitive systems configured.
Good	Account tracking system implemented; 50% - 74% of critical and sensitive systems configured.
Marginal	Account tracking system developed and implemented; systems not configured (resuming manual process).
Unsatisfactory	No progress

Objective 3.2 Assessment and Improvement

The weight of this Objective is 15%

Purpose and Supporting Information

BSA is committed to rigorous and candid self-assessment in order to monitor performance and promote early identification and resolution of issues that may impact accomplishment of the Laboratory's performance objectives.

Two fundamental and distinct elements of BSA's self assessment program are:
1. Monitoring and measuring progress towards achieving Critical Outcomes, Objectives, and Performance Measures, and
2. Monitoring and measuring progress towards other objectives associated with internal Laboratory initiatives or contractual obligations.

Processes for the first part of the program, monitoring and measuring progress towards accomplishment of the Critical Outcomes are relatively mature. However, BSA Corporate Oversight and BNL management have determined that processes for the second element of the self-assessment program need improvement. Specifically, those assessment activities identified the need to drive improvement in the consistency and integration of performance monitoring associated with deployment of laboratory management systems (in SBMS). This is the horizontal (or management system) "slice" of the Laboratory's assessment program.

Specific measures are developed that relate to improving the laboratory's approach for planning management system assessment activities, including both those conducted by the management system steward and those required to be

performed by line organization managers. The laboratory expects to apply these assessment processes to all management systems over the next three years (FY03, 04, and 05).

The laboratory is also pursuing continuation of the management system Maturity Evaluation process that has been highly successful in verification of the QA program. The FY03 Management System selections for both of these measures are based primarily on their role in supporting key Laboratory Programs (e.g. ISM, QA, EMS, ISSM).

In addition to the specific measures for discrete performance improvements, BSA and DOE continue to develop and pilot processes to measure the adequacy and effectiveness of the overall assessment program. To ensure objectivity of the evaluation, in FY03, Laboratory Management and DOE have agreed to pursue a third party evaluation process. This process will be similar to the one used to evaluate community involvement initiatives.

Measure 3.2.1 Management System Assessment Planning

3.2.1.1 Management System Objectives and Assessment Activities

The weight of this measure is 20%.

Establish a process for planning management system assessments, publish the process in SBMS and document management system assessment plans in accordance with the process for the following management systems by (three months after contract measures (Appendix B) approval).

- Acquisition Management
- Emergency Preparedness
- Environmental Management
- Facility Operations
- Facility Safety
- Hazardous Material Transportation
- Life Cycle Asset Management
- Radiological Control
- Safeguards and Security
- Work Planning and Control
- Worker Safety and Health

Notes: Development of the assessment plans will include solicitation and consideration of DOE input.

Performance Metric

Rating	*Criteria*
Outstanding	11of 11 completed on schedule
Excellent	10 of 11 completed on schedule
Good	9 of 11 completed on schedule
Marginal	8 of 11 completed on schedule
Unsatisfactory	< 8 of 11 completed on schedule

3.2.1.2 Consensus-based User/Peer Reviewer Maturity Determinations

The Weight of this measure is 30%

Complete formal consensus based user/peer reviewer Maturity Determinations for the following management systems.

- Facility Safety
- Safeguards and Security
- Worker Safety and Health
- Radiological Control

This measure includes the completion and documentation of the maturity determinations, subsequent management analysis of the results and necessary/appropriate updates of the assessment plans for the respective system.

Performance Metric

Rating	*Criteria*
Outstanding	4 of 4 completed by September 30, 2003
Excellent	3 of 4 completed by September 30, 2003
Good	2 of 4 completed by September 30, 2003
Marginal	1 of 4 completed by September 30, 2003
Unsatisfactory	No items completed by September 30, 2003

3.2.1.3 Third Party Evaluation of the Management System Assessment Program

The weight of this measure is 50%

An independent third-party review team will be established to evaluate the management system assessment program. The team will consist of individuals from the public and private sector. The individuals will be recognized as expert in the management of institutional/corporate level self-assessment programs in performance-based environments. The evaluation will be limited to the eleven management systems listed and the assessment activities defined by measure 3.2.1.1.

An evaluation protocol will be jointly developed by BSA and DOE using criteria extracted from the National Baldrige Quality Award, DOE G 414.1-1A *Management Assessment and Independent Assessment Guide*, and New York State Quality Award (Excelsior Award). The criteria used by the review team will be included in the protocol. During the FY03 cycle, the third party review team will also "validate" those criteria and recommend revision as appropriate for use in subsequent years.

Metrics:

As determined by the criteria and Third Party evaluation protocol.

Objective 3.3 Environmental Safety & Health

BNL will develop, implement, and continuously improve management systems, processes, and services to effectively and efficiently manage environment, safety, and health risks associated with the legacy vulnerabilities and work associated with support of ongoing Laboratory mission activities.

The weight of this Objective is 10%

Measure 3.3.1 Legacy ES&H Risk Management

The weight of this measure is 38%.

3.3.1.1 Site Hazard Footprint Management

The weight of this measure is 100%.

Purpose and Supporting Information

Long-term legacy ES&H risk management requires assurance that site hazards are primarily associated with on-going mission or mission support activities. Site hazards that are not associated with on-going work can present significant legacy vulnerabilities. They also present inefficiencies because the resources and attention required to effectively manage the hazards detract from work that is clearly connected to the Laboratory mission.

This measure is intended to continue establishing a "hazard footprint" for conditions that are not directly related to achieving the Laboratory mission and have not been transitioned to EM for disposition/ resolution. In the context of this measure, a "footprint" is defined as records, in the form of drawings, databases, and other documents, which collectively define the scope of hazard sufficiently to enable effective management (i.e., location, source term, volume, etc.) and definition of areas regarding future decommissioning needs. The focus will be on establishing the footprint for radiological hazards. The FY03 measure is a continuation of work commenced in FY02.

Once the footprint is established, management processes can be developed and action taken to address specific issues. This initiative is a natural follow-on to the Facility Review Project because it develops and implements management processes designed to aid in obviating the need for any such site-wide initiative in the future.

Measure

BNL will perform research activities, with limited physical characterization, to define/baseline areas with regard to radiological status. The goal is to define areas in accordance with standard definitions applied to decommissioning status, e.g. suspect, known, adjacent, non-suspect for radiological contamination. The research activities include:

- reviewing log books and experimental activities
- reviewing surveys
- reviewing occurrence reports
- assembling process knowledge
- physical walk downs
- limited characterization surveys

The buildings/areas to be defined in FY03 are:

129	Safety and Health Services Division/Radiological Controls Division
130/130C	Engineering Building, Independent Oversight
134	Community Involvement, Government & Public Affairs, Fiscal
179	Housing/Transportation/Travel and Post Office
185	Human Resources
355	Procurement & Property Management Division
526	Energy Sciences and Technology Department
527	Office of Management Services
555	Chemistry
801	Hot Lab

Performance Metric

The performance metric rating is determined by the number of buildings/areas completed.

Rating	*Criteria*
Outstanding	Baseline determined for ≥ 90% of buildings/areas
Excellent	Baseline determined for ≥ 80% ≤89% of buildings/areas
Good	Baseline determined for ≥ 70% ≤79% of buildings/areas
Marginal	Baseline determined for ≥ 40% ≤69% of buildings/areas
Unsatisfactory	Baseline determined for ≤ 40% of buildings/areas

Measure 3.3.2 On-going ES&H Risk Management

The weight of this Measure is 62%.

3.3.2.1 Pollution Prevention

The weight of this Measure is 50%.

Purpose and Supporting Information

Investment in pollution prevention can help BSA save money, create a safer workplace, and help protect the environment at the same time. The Laboratory's Pollution Prevention (P2) program is focused on incorporating P2 into work planning (facility design, experimental review, process assessment, and work planning). Proposals for funding pollution prevention opportunities are submitted to the Laboratory Pollution Prevention Council based on several factors, including funding availability, return on investment, and achieving goals associated with specific waste streams. Project plans are developed to an appropriate level based on complexity for funded P2 projects.

This measure focuses on driving site-wide involvement in the Pollution Prevention Program. It will help develop a rich database of pollution prevention opportunities so when funding becomes available we are prepared to take advantage of the opportunity. It enhances the communication of best practices and lessons learned. *Greening the Government* pollution-prevention goals are incorporated into the evaluation criteria for funding pollution prevention projects. Additionally, having clear evidence of site-wide management commitment to, and implementation of, Pollution Prevention initiatives, helps the Laboratory to be recognized as leaders in the DOE community and improves our chances of obtaining additional pollution prevention funds.

Measure

Each organizational unit must demonstrate active involvement in the BNL Pollution Prevention Program. For the listed organizational units, "demonstrating involvement" is evidenced by submitting at least two pollution prevention project proposals to the P2 Council and/or two success stories and/or lessons learned stories. List of organizations that must submit P2 Proposals and/or success stories/lessons learned:

- Basic Energy Sciences Directorate
- EENS Directorate
- Environmental Management Directorate
- Facilities and Operations Directorate
- Finance and Administration Directorate
- High Energy & Nuclear Physics Directorate
- Life Sciences Directorate

Other organizational units (listed below) shall demonstrate involvement by establishing a pollution prevention objective in their organization's EMS Program.

- ESHQ Directorate
- CIGPA Directorate and Director's Office

Performance Metric

Rating	*Criteria*
Outstanding	All organizational units demonstrated involvement in the P2 Program
Excellent	8 out of 9 organizational units demonstrated involvement in the P2 Program
Good	7 out of 9 organizational units demonstrated involvement in the P2 Program
Marginal	6 out of 9 of organizational units demonstrated involvement in the P2 Program.
Unsatisfactory	Less than 6 of organizational units demonstrated involvement in the P2 Program

3.3.2.2 OSHA Reportable Injury Management

The weight for this Measure is 0%.

Background:

Although BSA/BNL successfully met the BSA Contract Off-Ramp provision in FY 2000, the Laboratory's performance in this measure has been deteriorating. The FY 03 incentive is aimed to ensure that BNL works to regain and sustain the 2000 performance (i.e., DOE Research Contractor Average Lost Workday Case Rate (LWCR).

BNL will seek to achieve excellence in worker safety and health protection. In the area of Occupational Safety and Health BNL will seek to improve the following reportable rate:

Lost Workday Case Rate (LWCR)

Where:

$$\text{LWCR (per 100 FTEs)} = \frac{\text{Number of Lost Workday Cases} \times 200{,}000}{\text{Total Hours Worked}}$$

For FY 2003, BNL's LWCR will improve to within 40% of the DOE Research Contractor Average for CY2002 (Ex., If DOE Research Contractor LWCR Average for CY2002 is 1.0, BNL must improve its LWCR performance to below 1.4). The DOE Research Contractor Average will be the data reported in the CAIRS Table S3 (http://tis.eh.doe.gov/cairs/cairs/summary/main.html) for the period of January to December 2002. The BNL performance value is calculated from the BNL Occupational Safety Management Information System (OSMIS) Database and will represent the 12 months of FY 2003 data.

Performance Incentive

BNL LWCR for FY03 must improve to within 40% of the DOE Research Contractor Average for CY2002. A penalty of $1K will be assessed to available fee for every 1% (of the DOE Research Contractor Average for CY 2002) increment in the BNL LWCR above 140% of the DOE Research Contractor Average for CY2002. (Ex., If the BNL LWCR is 159% of the DOE Research Contractor Average, a penalty of $19K will be assessed.) This penalty will be capped at $100K.

3.3.2.3 Radiological Source Inventory Database

The weight of this measure is 50%.

Purpose and Supporting Information

The Radiological Control Division (RCD) has overall responsibility for the radioactive source accountability program for Brookhaven National Laboratory (BNL). This program maintains a database of all accountable radioactive sources. RCD has taken action to expand the database to include all discrete radioactive sources. This database could be further expanded, and it's usefulness enhanced by incorporating it into a web-based system with sort capability. These features would allow BNL users to readily access inventories, and also find compatible radioactive sources for their work. A mature program would improve radiological safety at BNL in many respects.

Performance Metric

Rating	*Criteria*
Outstanding	Expand the information in the current RCD database to include other major, discrete radiological source terms that would be of interest to Building Managers, etc..., to enhance the management of facilities through the Facility Use Agreement (FUA) system, e.g. balancing hazardous inventories versus administrative limits. The deliverable will be a design specification to be developed and a prototype for testing for the enhanced radiological source term information system. The design will consider input from the building managers, department management, and FSS Staff.
Excellent	Establish a web-based system that allows Laboratory personnel to access the radiological inventory information of their facilities/departments. This system would allow users access to source inventory databases, both accountable and non-accountable. It would also allow for the users to sort the data based on source custodian, department, and location fields.
Good	Provide web-based tables of source inventories by department building and establish links to SBMS source subject areas.
Marginal	Provide web-based tables of source inventories by department.
Unsatisfactory	No action.

Objective 3.4 Site Infrastructure, Facilities, and Operations

BNL will maintain and improve the efficiency and reliability of the site infrastructure and manage projects to upgrade site facilities to meet the objectives of the Strategic Facility Plan and Master Site Plan.

The weight of this measure is 10%.

Measure 3.4.1 Pursue Alternative Financing (AF) for Infrastructure Projects

The weight of this measure is 25%.

Purpose, Means, and Strategies

Available infrastructure funding at BNL (capital replacement, capital renewal) has not been adequate to meet past, current, and future needs. Underfunding of infrastructure persisted throughout the 1990's and has resulted in very large backlogs of infrastructure requirements.

Therefore BSA will pursue alternative (non-DOE) project financing to meet selected infrastructure needs.

Depending on the nature of the project, alternative funding could come from a variety of sources, including: energy services performance contractors (ESPC's), utility energy services contracts (e.g. with NYPA, LIPA, KeySpan), private sector developers, BSA financing, New York State financing, or grants from other government (non-DOE) agencies.

BNL considers that the most attractive method of funding an infrastructure need at BNL is through "direct" federal funding (construction / operating funds) of the project or need. Absent that funding, alternative financing may be an acceptable means of accomplishing needed projects. Our criteria for using alternative financing would be:

- No DOE or BNL funding is available for the project.
- Project investment could be repaid using the savings resulting from project implementation – preferably from investments with less than five-year payback. (Future operating funds would not be "mortgaged".)
- The project could be repaid by available / related revenues paid by willing "customers" deriving direct benefits (e.g., space charges on new or renovated space) and other benefits accrue to the Laboratory (attracting new research, improved user experience, improved image, improved quality of work-life for employees).
- The project is deemed by BSA to be essential to continued Laboratory operations and no reasonable alternative funding exists (e.g., available funding committed to equal or higher priority projects).

In FY02, BSA began detailed preparations to develop an alternatively financed building project by:

1. Making opportunities known to potentially interested parties through solicitations, advertisements, targeted letter writing, and other interactions;
2. Meeting with and working with financers / developers to investigate and develop economically attractive projects;
3. Developing appropriate Request for Proposal documents for use in soliciting alternative financing for a **BNL Housing Reconstruction Project.**

For FY03, a two-pronged approach is planned. The first part is to continue the effort to develop the alternatively financed **BNL Housing Reconstruction Project**. The second part, to be conducted in parallel with the first, is to determine the scope, evaluate the economics, gauge developer interest, and prepare a request for proposal (if the project proves feasible) for an alternatively financed **Energy Sciences Building**.

Measures
Composite score for this initiative will be calculated (weighted) as follows:

AF = 0.67 * HRP + 0.33 * ESBF

3.4.1.1 **BNL Housing Reconstruction Project (HRP)**

The weight of this measure is 67%.

BNL Housing Reconstruction Project (HRP) performance will be measured by total schedule variance.

1. **Housing Reconstruction RFP**

The weight of this element is 50%.

a.	Provide Request For Proposal (RFP) to DOE for review	3/3/03
b.	Issue RFP to developers	5 days after DOE approval

Metric

Outstanding	On Time
Excellent	30 day schedule delay
Good	60 day schedule delay
Marginal	90 day schedule delay
Unsatisfactory	>90 day schedule delay

On time is defined as noted above. Schedule delay is a combination of slippage from the 3/3 date and greater than 5 days after DOE approval.

2. **Housing Reconstruction Contract**

The weight of this element is 50%.

Metric

Outstanding	Offeror/Developer selected and Contract awarded by 9/30/03
Excellent	Offeror/Developer selected by 9/30/03
There are no other elements of this metric.	

3.4.1.2 Energy Sciences Building Feasibility (ESBF)

The weight of this measure is 33%.

Energy Sciences Building Feasibility (ESBF) schedule performance will be measured against the following project schedule for FY03:

MILESTONE	DATE
Alternative Financing Economic Analysis (BNL/BSA)	12/13/02
Energy Sciences Building Programming (BNL/BSA)	12/13/02
Determine Need for / Availability of Corporate Financial Guarantee (BNL/BSA/Battelle)	1/17/03
Go / "No-go" Decision (BNL/BSA)	1/17/03

If Decision is Not to Proceed:	
Issue Report Justifying "No-go" Decision	***4/1/03***
If Decision is to Proceed:	
Prepare Public Expression of Interest (BNL/BSA)	1/17/03
DOE Review and Approval of Expression of Interest (DOE)	1/31/03
Publish Expression of Interest (BNL/BSA)	2/7/03
Request for Proposal Conference (BNL/BSA)	3/7/03
Prepare Draft Request for Proposals for Review (BNL/BSA)	6/30/03
Prepare Issue and Decision Paper (BNL/BSA)	6/20/03
Present Issue and Decision Paper to BNL Policy Council (BNL/BSA)	6/30/03
DOE Review of Draft Request for Proposals (DOE)	8/31/03
Issue RFP (BNL/BSA)	***9/30/03***

Performance Level Metrics

Performance will be measured in terms of total schedule variance, e.g., acceleration or slippage of the scheduled milestones:

- ***"Issue Report Justifying "No-go" Decision"*** (for a "No-go" decision)

  OR

- ***"Issue RFP"*** (for a "Go" decision).

Schedule variance will be measured as total days of acceleration (positive days) or delay (negative days) schedule minus any days of acceleration (positive days) or delay (negative days) caused by DOE's actions (similar to BNL Housing Reconstruction Project).

ESBF SCORE	*CONSTRUCTION START MILESTONE COMPLETED BY BNL/BSA*
Outstanding	Ahead of Schedule
Excellent	1 to 21 days behind schedule
Good	22 to 42 days behind schedule
Marginal	43 to 63 days behind schedule
Unsatisfactory	More than 63 days behind schedule

NOTES

1. BNL Policy Council may determine that the proposed alternatively financed project is not viable for the Laboratory.
2. In the event the project is determined not to be viable, BNL/BSA will provide a report to DOE justifying its "no-go" position. If DOE accepts the justification provided, the report issue will replace the RFP milestone for the purpose of this performance measure.
3. In the event of a "no-go" decision, BNL/BSA will proceed by re-exploring DOE funding and other alternative financing methodologies in FY04.

Measure 3.4.2 Project Management

The weight of this measure is 50%.

PURPOSE, MEANS, AND STRATEGIES
In a regime of very scarce infrastructure resources, BSA will manage its construction and construction-like projects to ensure scope, schedule and cost objectives are readily met. Approved projects are completed on time, within budget, and meet baseline expectations. Uncosted carryovers are minimized.

Measures

Projects - This performance indicator is for all capital-funded construction projects, excluding Strategic Systems (formerly Major Projects and Major Systems Acquisitions) and EM Projects. It examines the percent of capital funds obligated and costed per fiscal year, the percent of projects on schedule and the number of capital construction projects with scope completed within the Total Estimated Cost (TEC). The formula for calculating the performance indicator is:

PROJECT RATING (PM):

$$(PM) = 0.2\,(a^1 + a^2) + 0.2\,(b^1 + b^2) + 0.2\,(c)$$

Performance Measure

Outstanding	(PM) = 0.90 to 1.00
Excellent	= 0.80 to 0.89
Good	= 0.70 to 0.89
Marginal	= 0.60 to 0.69
Unsatisfactory	= Less than 0.60

Where:

FUNDS COMMITTED:

$$(a^1) = \frac{\textit{Actual Funds Committed}}{\textit{Total Planned Funds Committed}}$$

Description of Proposed Method

$$\frac{\text{Actual Present Year Funds [Line Item + GPP] Committed}}{\text{Total Planned [Line Item + GPP] Committed}}$$

Notes
a. Measure funds commitment performance only for funds received in the fiscal year being measured.
b. Measure will not consider funds received late in fiscal year -- only funds received in financial plan during first quarter will be used in calculation.
c. Total planned funds committed exclude planned contingency funds (usually about 12%).
d. Only planned (requested) project funds will be included.
e. Funds committed (obligated) will continue to be measured when contracts and PO's are "pinned", as reflected in BNL's PeopleSoft accounting records.

FUNDS COSTED:

$$(a^2) = \frac{\textit{Actual Funds Costed}}{\textit{Total Planned Funds Costed}}$$

Description of Proposed Method

$$\frac{\text{Actual Present Year Funds [Line Item + GPP] Costed}}{\text{Total Planned [Line Item + GPP] Costed}}$$

Notes

a. Measure funds costed performance for funds received in fiscal year being measured.
b. Measure will not consider funds received late in fiscal year -- only funds received in financial plan during first quarter will be used in calculation
c. Only planned (requested) project funds will be included.

PROJECT SCHEDULE COMPLIANCE (GPP and IHEM)

$$(b^1) = \frac{\textit{No. of GPPs Completed on Schedule}}{\textit{No. of GPPs Scheduled to Complete}}$$

Description of Proposed Method

1) BNL and DOE agree on actual completion milestone dates and document and track them in the Plant Engineering Monthly Project Report.
2) List all GPP and IHEM projects with TEC >$300K and completion milestone falling in current fiscal year.
3) Determine how many were completed on-time using construction "substantially complete" as complete.
4) "Substantially complete" means project is ready for beneficial occupancy or use, as described in the Project Management Control System.

Notes

a. GPP and IHEM project schedules will be established in cooperation with BHG in continuation of current approval process.

PROJECT SCHEDULE COMPLIANCE (Line Item)

$$(b^2) = \frac{\text{No. of Line Item Milestones}(^1)\text{ Completed on Schedule}}{\text{No. of Line Item Milestones}(^1)}$$

(1) Key controlled Milestones

Description of Proposed Method

1. BNL and DOE agree on actual baseline completion milestone dates and document and track them in the Plant Engineering Monthly Report.
2. List all Line Item projects with key controlled milestones falling in the current fiscal year.
3. Determine current year milestones completed on or ahead of schedule.

Notes

a. Key controlled milestones are those described in the approved Project Management Plan:
b. Design Start
   - Design Complete
   - Construction Start
   - Construction Complete

c. Construction complete is defined as "substantially complete."
d. "Substantially complete" means project is ready for beneficial occupancy or use, as described in the Project Management Control System.

SCOPE COMPLETED WITHIN APPROVED BASELINE
(LINE ITEM, GPP AND IHEM [>300K])

$$(c) = \frac{\text{Projects completed within Approved Baseline}}{\text{Total Projects Complete}}$$

Description of Proposed Method

1. Review Line Item, GPP and IHEM (>$300K TEC) projects completed through the fiscal year.
2. Upon project completion, determine whether project baseline scope was completed within the approved baseline Total Estimated Cost (TEC).
3. Determine the total number of Line Item, GPP and IHEM (>$300K TEC) projects completed within approved baseline (approved original project and approved baseline change proposals)
4. Determine total number of projects completed.
5. Calculate:

$$(c) = \frac{\text{Projects Completed within Approved Baseline}}{\text{Projects Completed}}$$

Notes
a. Justifiable BCPs will be approved by DOE-BAO for legitimate scope changes or reductions (i.e., due to program changes, reasonable unforeseen project conditions, new regulatory requirements, etc.)
b. Plant Engineering is not currently managing any projects classified as "Strategic Systems" under LCAM (formerly Major Projects and Major System Acquisitions.

Measure 3.4.3 Facilities / Infrastructure Maintenance

The weight of this measure is 25%.

Purpose, Means and Strategies

This measure tracks how BNL's conventional infrastructure maintenance program is functioning.

This measure is an indicator of actual maintenance effectiveness, by measuring the reliability of BNL's building infrastructure and electrical infrastructure as these systems serve BNL's programs. Reliability is a measure of how many "customers" are impacted by unplanned outages (due to equipment failures) and how long the outages last (BNL's ability to repair problems and restore service).

3.4.3.1 Infrastructure Reliability Index (RI)

The weight of this measure is 100%.

$$(RI) = 0.6\,(ESR) + 0.4\,(BFR)$$

Electric System Reliability (ESR):

$$(ESR) = \frac{\textit{Total Customer Hours} - \textit{Unplanned Outage Customer Hours}}{\textit{Total Customer Hours}}$$

Performance Measure

Outstanding	ESR = greater than 0.999
Excellent	0.998 to 0.999
Good	0.996 to 0.997
Marginal	0.994 to 0.995
Unsatisfactory	Less than 0.994

Description of Proposed Method

1. When an unplanned electric power outage occurs, an electrical supervisor will log outage.
2. Information will be forwarded to O&M Manager's office, where the log will be completed. Data will be tracked monthly.
3. Through the fiscal year, all electric power customer-outage-hours will be totaled to arrive at a figure for total customer-hours outage for the fiscal year.
4. Electric distribution system reliability will be calculated:

$$\frac{\text{Total Customer Hours - Unplanned Outage Customer Hours}}{\text{Total Customer Hours}}$$

Notes:

a. Standard population figures for each building will be supplied by Plant Engineering's planning group and updated periodically.
b. Customer outage hours will be based on the actual time the facilities are without power times the population for those buildings.
c. Total customer hours will be calculated using figures supplied by Plant Engineering's planning group times 8760 hours per year.
d. Only outages due to failures in the BNL-maintained power distribution system (13.8kV and 2400V) will be included. Off-site (LIPA) outages will not be included. Outages due to malfunctions inside buildings will not be included.

Building and Facilities Reliability (BFR):

$$(BFR) = \frac{\text{Total Building Availability } (ft^2\text{–days}) - \text{Building Failures } (ft^2\text{–days})}{\text{Total Building Availability } (ft^2\text{–days})}$$

Performance Measure

Outstanding	BFR = greater than 0.999
Excellent	0.998 to 0.999
Good	0.996 to 0.997
Marginal	0.994 to 0.995
Unsatisfactory	Less than 0.994

Description of Proposed Method

1. When an unplanned building system outage or failure occurs, which significantly disrupts occupants of a building or renders the space unusable, the cognizant Plant Engineering

supervisor will log outage. The information will be forwarded to O&M Manager's office. Data will be tracked.

2. At the end of each reporting period (month), all building failures will be totaled to arrive at a figure for building and facility reliability for the fiscal year.
3. Building and facility reliability will be calculated as a percentage:

$$\frac{\text{Total Building Availability (ft}^2\text{–days)} - \text{Building Failures (ft}^2\text{–days)}}{\text{Total Building Availability (ft}^2\text{–days)}}$$

Notes:

a. Standard square footage for each building will be from Plant Engineering's planning group space database.
b. Building and facility failure days will be based on the actual days the facilities are without critical services (or are unusable) times the normal population for those buildings.
c. Total Building Availability will be calculated using site square footage figures supplied by Plant Engineering's planning group times 365 days per year.

Objective 3.5 Communications and Trust

The Laboratory will enhance the foundation of trust and confidence it has built by: strengthening existing relationships and building new partnerships with key stakeholders, elected and appointed officials, civic leaders, and other important constituencies; effectively communicating the Laboratory's scientific initiatives and accomplishments; generating community enthusiasm for Laboratory research programs; and working to fulfill the education mission shared with DOE to enhance science literacy.

The weight of this Objective is 10%.

Purpose and Supporting Information

The Laboratory's Communications, Community Involvement, and Education Program plans serve as a guide to the many activities and initiatives that will be pursued in FY03 to fulfill this objective and to help meet the expectations and performance measures of science and operational departments and divisions across the Laboratory.

Stakeholder feedback will be collected and research and self-assessments will be conducted throughout the year to determine program effectiveness, to evaluate program utility, and to make mid-course corrections as necessary.

BNL and BAO will conduct an independent peer review process to evaluate the Laboratory's communications, community involvement, and education programs. The peer review will focus primarily on the measures below.

Measure 3.5.1 Science & Technology Communication Program

The weight of this Measure is 40%.

The objective of this measure is to increase regional and national recognition of the Laboratory and the Department of Energy and to increase understanding of science and technology research at the Lab.

Strategic issues include showcasing the results of Brookhaven research in high-profile initiatives that produce exciting and scientifically interesting new information, building relationships with the press, and expanding the Laboratory's use of electronic media.

This year, the Laboratory is planning to enhance the effectiveness of its science and technology communications by focusing on policymaking and "science attentive" and "science interested" publics. Since the science attentive audience prefers to access science information via the Web, the first six months of FY03 will focus on increasing this audience's ease of access to our material by reviewing the most common keywords

used to search our site and then enhance key web page "meta tags" accordingly. It is understood that a survey is currently being developed with the support of the National Energy Technology Laboratory, which seeks to explore science attentive, policy making and science interested publics in more depth and determine how these publics receive and process information. The results of this survey, which are expected at the end of the first quarter of FY03, will be evaluated and used to inform the Laboratory's communications planning for the remainder of FY03.

Specific science initiatives - such as RHIC, nanoscience, addiction research, counter-terrorism and environmental research - are carefully tracked, and communications plans are prepared and or updated as needed in anticipation of developments during FY03. In FY02, as an example, Laboratory personnel in the Basic Energy Sciences, Energy, Environment & National Security and the Community Involvement, Education, Government and Public Affairs directorates worked together to promote participation by business, academic, government and the science community in a nanoscience workshop. The workshop as well as the Laboratory's research in nanoscience received favorable publicity throughout the year. Since one of the five Department of Energy nanoscience centers will be located at the Laboratory, we expect that there will continue to be a variety of opportunities during FY03 to showcase the Laboratory's research and to inform the media, policy makers and science attentive publics about the development of the Laboratory's center for functional nanomaterials.

To expand and enhance communications with policy makers, the Laboratory will query policy makers in Washington, Albany and on Long Island to determine how they prefer to receive information about the Laboratory's/DOE's science programs and at what frequency. A program to increase communications with this audience will be developed based on the information received.

The inaugural issue of Brookhaven's new science magazine, *Discover Brookhaven*, was available on the Laboratory's website in June 2002 and in hardcopy the following month. As successive issues are produced on-line in FY03, the Laboratory will refine the magazine's content based on solicited feedback from target audiences, including program managers at funding agencies and facility users. The number of links within the online magazine that can be used by readers to explore related material will be expanded.

The Laboratory's website has become one of the key mediums through which Lab programs, events and achievements are promoted. Recognizing the importance of this medium, the Laboratory's main website will be further refined so that timely and relevant content, both text and visuals, and background information are readily available to reporters, the science-attentive public and Laboratory stakeholders. Further improvements will be to information architecture and breadth and type of information available. As the website continues to grow, site maintenance workload increases proportionally. To meet the demands of increased workloads with static resources, streamlined maintenance methods such as the use of "include" files (single files referenced by multiple pages), and cascading style sheets (a method of generating uniform, site-wide graphic formatting will be evaluated and implemented where practical.

The Laboratory's Office of Educational Programs (OEP) plays an important role in promoting the understanding of science and technology programs conducted by the Laboratory and funded by the Department of Energy. The strategic thrust of the Laboratory's science education programs for FY03 will be to participate in new Department of Energy science education programs, including the high school science bowl, provided funding for these programs is made available.

The Laboratory will also be hosting the National Institute of Science-Beta Kappa Chi Joint Annual meeting. Students from predominantly Black Colleges and Universities will present their research at the conference. To showcase its scientific research at RHIC and to make it accessible to high school students and their teachers, the Lab will continue to work with the Joint Institute for Nuclear Research in Dubna, Russia on the development of an on-line classroom provided funding for this program is made available.

Measure 3.5.2 Stakeholder Partnerships & Involvement

The weight of this Measure is 40%.

The Laboratory is committed to expanding its relationships and building partnerships with key constituencies. To meet this commitment in FY03 the Laboratory will:

- Build new and enhance established relationships in the business, not-for-profit, science, education and public policy arenas. The Laboratory will identify key stakeholders and opinion leaders in New York State who represent or who are involved with business, education and government organizations with a view towards developing long-term relationships with them. As part of this effort, the Laboratory will seek opportunities to partner with these constituencies in seeking funding for science and technology initiatives and science education programs and promoting the importance of science and technology in the State and region. (Ongoing to be reported on mid-year and end of year)

- Fully implement (assuming funding is available) the Volunteers in Partnership Program to ensure that a minimum of ten volunteer activities is fully supported by the Laboratory. (By end of fourth quarter)

- Residents in the area south of the Laboratory have been identified through research activities as having concerns and issues with the Laboratory as their neighbor. Established programs within the Laboratory, including the Envoy Program, Summer Sundays, Tours and Speakers Bureau will target this area in order for the community to achieve a better understanding of the Laboratory's mission and for the Laboratory to begin to establish a long-term relationship with these neighbors. (Ongoing, to be reported on mid-year and end of year)

The Laboratory is committed to building a mutual understanding between the Laboratory, its stakeholders and the general public. To meet this commitment in FY03 the Laboratory will:

- Ensure that 95% training is accomplished for Level 1 and Level 2 managers in the community involvement and decision-making process. (By end of first quarter)

- Fully implement the issues management tracking system and make it available as read only for Level 1 managers. (By end of second quarter)

- Determine the effectiveness of the CI process by evaluating the frequency of its use by Level 1 and 2 managers. (Ongoing, to be reported mid-year and end of year)

Measure 3.5.3 Employee Communications Program

The weight of this Measure is 20%.

Recognizing the importance of effective employee communications to the success of an organization, the Laboratory plans to develop a formal employee communications program. The program will be based on employee feedback gathered through focus groups, comment cards and public inquiries as well as one-on-one and small group interactions. As part of the program, existing employee communications vehicles, such as the Bulletin, Monday Memo, Intranet, and broadcast e-mails, will be evaluated by CEGPA staff and reviewed with relevant employee groups; the Intranet and print employee publications will be modified as appropriate to reflect employee feedback. An assessment of the effectiveness of employee involvement programs regarding environmental management decisions and issues of interest to employees will be conducted and issue-based communications plans will be developed as appropriate.

U.S. Department of Energy

and

Brookhaven Science Associates, LLC

ATTACHMENT J.3

APPENDIX C

SPECIAL FINANCIAL INSTITUTION ACCOUNT

Applicable to the Operation of
The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M094

APPENDIX C

SPECIAL FINANCIAL INSTITUTION ACCOUNT

DOE WILL COOPERATE WITH THE

SELECTED CONTRACTOR TO ARRANGE AN

APPROPRIATE AGREEMENT -- SEE

PART III, SECTION J, APPENDIX C

CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING

This agreement is entered into this First day of January 1998, between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

RECITALS

(a) On the effective date of August 21, 1995, DOE and the Contractor entered into Modification No. M327 of Contract No. DE-AC02-76CH00016, or successor contract, providing for transfer of funds on a payments-cleared basis.

(b) DOE requires that amounts transferred to the Contractor thereunder be deposited in a Special Demand Deposit Account at a financial institution covered by the U.S. Department of Treasury - approved Government deposit insurance organizations that are identified in I TFM 6-9000.

These special demand deposits must be kept separate from the Contractor's general or other funds; and the parties are agreeable to so depositing said amounts with the Bank.

(c) The special demand deposit account shall be designated Associated Universities, Inc. (or successor Contractor)/Brookhaven National Laboratory General Operating Account.

COVENANTS

In consideration of the foregoing, and for other good and valuable considerations, it is agreed that:

(1) The Government shall have a title to the credit balance in said account to secure the repayment of all funds transferred to the Contractor and said title shall be superior to any lien or claim of the Bank or others with respect to such accounts.

(2) The provisions of said contract(s) between DOE and the Contractor relating to the transfer of funds into and withdrawal of funds from the special demand deposit account, but the Bank shall not be responsible for the application of funds withdrawn from said account. After receipt by the Bank of directions from DOE, the Bank shall act thereon and shall be under no liability to any party hereto for any action taken in accordance with the said written directions. Any written directions received by the Bank from the Government upon DOE stationary and purporting to be signed by, or signed at the written direction of, the Government may, insofar as the rights, duties, and liabilities of the Bank are concerned, be considered as having been properly issued and filed with the Bank by DOE.

(3) DOE, or its authorized representatives, shall have access to financial records maintained by the Bank with respect to such a special demand deposit account at all reasonable times and for all reasonable purposes, including, but without limitation to, the inspection or copying of such financial records and any or all memoranda, payment requests, correspondence, or documents pertaining thereto. Such financial records shall be preserved by the Bank for a period of six (6) years after the final payment under this Agreement.

(4) In the event of the service of any writ of attachment, levy of execution, or commencement of garnishment proceedings with respect to the special demand deposit account, the Bank will promptly notify the Department of Energy at the Chicago Operations Office, 9800 S. Cass Avenue, Argonne, Illinois 60439.

(5) DOE shall authorize funds that shall remain available to the extent that obligations that have been incurred in good faith thereunder by the Contractor [Associated Universities, Inc., or successor Contractor] to the Bank for the benefit of the special demand deposit account. The Bank agrees to honor upon presentation for payment all payments issued by the Contractor and to restrict all withdrawals against the funds authorized to an amount sufficient to maintain the average daily balance in the special demand deposit account in a net positive as close to zero as administratively possible.

If the calculated average daily balance for the month, inclusive of the time deposit account, results in a positive account balance which exceeds the balance needed to cover transaction costs for that month, and the financial institution had no control over the positive balance, the financial institution will compensate DOE for the loss of the availability of funds by multiplying the average daily balance for the month by the Treasury Tax and Loan Funds Rate divided by 12. If the financial institution caused the positive account balance, it shall compensate by multiplying the excess fund balance by the Federal Funds Rate adjusted for the proper period of time. The compensation will be remitted to the cognizant DOE finance office.

The Bank agrees to service the account in this manner based on the requirements and specifications contained in this Agreement, in consideration of the placement by DOE of a noninterest-bearing time deposit in an amount agreed upon. The Bank agrees that per item costs, detailed in the Attachment C "Quotation Pricing Sheet" contained in the Bank's aforesaid bid will remain constant during the term of this Agreement, but may be reviewed for adequacy at the request of either party, with a formal review required semiannually. The contractor will withdraw $565,000 in funds from the special demand deposit account in the Bank. This account will hereinafter be defined as the time deposit account. The funds in the time deposit will remain on deposit and shall not be withdrawn or used for any purposes without the authorization of DOE. The amount of the deposit may be adjusted upward or downward but only with the approval of DOE.

(6) The Bank will post collateral, acceptable under Department of Treasury Circular No. 176, with the Federal Reserve Bank in amount equal to the net balances (including the noninterest-bearing time deposit account) in all of the accounts included in this Agreement.

(7) This Agreement, with all its provisions and covenants, shall be in effect for a term of two years, beginning on the first day of January, 1998, and ending through the thirty-first day of December, 1999.

(a) DOE may extend the term of this Agreement for an additional one year term by written notice to the Contractor and the Bank provided that DOE shall give the Contractor and Bank a preliminary written notice of its interest at least 90 days before this Agreement expires. The preliminary notice does not commit DOE to an extension.

(b) If the DOE exercises this option, the extended agreement shall be considered to include this option provision.

(c) The duration of the Agreement; including the exercise of any options under this Covenant, shall not extend past December 31, 2000.

(8) DOE or the Contractor may terminate this Agreement at any time within the agreement period submitting written notice to the other parties 90 (ninety) days prior to the desired termination date. The specific provisions for operating the account during the 90 (ninety) day period are contained in Covenant (11).

(9) DOE or the Contractor may terminate this Agreement at any time within the agreement period upon 30 days written notice to the bank if DOE or the Contractor, or both parties find that the bank has failed to substantially perform its obligations under this Agreement or that the Bank is performing its obligations in a manner that precludes administering the program in a effective and efficient manner or that precludes the effective utilization of the Government's cash resources.

(10) Notwithstanding the provisions of Covenants 8 and 9, in the event the contract (referenced in Recital (a) between the DOE and the Contractor) is not renewed or is terminated, this Agreement between DOE, the Contractor and the Bank may be terminated automatically by DOE or will be assignable to a successor Contractor upon the delivery of written notice to the Bank.

(11) In the event of termination or expiration the Bank agrees to retain the Contractor's special demand deposit account for an additional 90-day period to clear outstanding payment items. Within seven (7) days of expiration of the agreement an analysis of the special demand deposit account shall be made by the DOE to determine whether an insufficient or excessive balance was maintained in the time deposit account to compensate the Bank for services rendered up to the expiration date.

(a) If the analysis indicates that the Bank has been insufficiently compensated for services rendered up to the expiration of the Agreement, the Contractor shall-

(1) Maintain on deposit, during this 90 day period; sufficient Federal funds to reimburse the Bank for prior cumulative loss of earnings, and

(2) Maintain on deposit in the time deposit account sufficient Federal funds to compensate the bank for services rendered.

(b) If the analysis indicates that the Bank has been overcompensated for services rendered up to the expiration of the Agreement, DOE shall close out the time deposit account and secure from the Bank a payment in an amount equal to the cumulative excess compensation less compensation for estimated services to be rendered during the 90-day period.

(c) If cumulative excess compensation is not sufficient to compensate the Bank for services rendered during the 90-day period, adjustments will be made to the time deposit account to compensate the Bank for the difference between the cost of services rendered during the 90-day period and the cumulative excess compensation.

During the entire 90 day period, it is further understood that:

(a) The Bank shall maintain collateral in an amount sufficient to collateralize the highest balance in the account, less Federal Deposit Insurance Corporation coverage on the accounts.

(b) All service charges shall be consistent with the amounts reflected in this Agreement.

(c) All terms and conditions of the aforesaid bid submitted by the Bank which are not inconsistent with this 90-day additional term shall remain in effect

(d) This agreement shall continue in effect, with exception of the following:

(1) Funds Authorized (Covenant 5)

(2) Term Agreement (Covenant 7).

(3) Termination of Agreement (Covenant 8 and 9).

The Bank has submitted the forms entitled "Offeror Representations and Certifications" and "Quotation Pricing Sheet," the latter of which includes the calculation of required compensating balance. These forms have been accepted by the Contractor and the Government and are incorporated herein with the document entitled "Financial Institution's Information on the Checks-Paid Letter of Credit" as an integral part of this agreement.

Any direction received by the Bank from DOE which alters any portion of the terms and conditions of this agreement, including the amount of the time deposit agreed to herein, shall not be valid unless signed by the Contracting Officer.

IN WITNESS WHEREOF the parties hereto have caused this Agreement which consists of 5 pages including the signature pages, to be executed as of the day and year first above written.

12-5-97
Date Signed

By ROBERT P. GORDON
CONTRACTING OFFICER
(Typed name of Contracting Officer)

(Signature of Contracting Officer)

WITNESS

(Typed Name of Witness)

Associated Universities, Inc.
(Typed Name of Contractor)

(Signature of Witness)

By Jerome Hudis
(Typed Name of Contractor's Representative)

Note-In case of corporation, Witness not required. Type Names under all signatures.

(Signature of Contractor's Representative)

Vice President and Controller
(Title)

1400 16th Street, N.W.
Washington, DC 20036
(Address)

December 3, 1997
(Date of Signature)

(Typed Name of Witness)

The Chase Manhattan Bank
(Typed Name of Bank)

Signature of Witness)

By Joseph M. Bognanno
(Name of Bank Representative)

(Signature of Bank Representative)
*See attached letter.

Note-In case of corporation, Witness not required. Type Names under all signatures.

Vice President
(Title)

One Chase Square - Tower 8
Rochester, NY 14643
(Address)

December 22, 1997
(Date of Signature)

NOTE-The Contractor, if a corporation, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Agreement and the Certificate.

CERTIFICATE

I, Leland F. Willis, certify that I am the Vice President of Environmental Safety and Health of the corporation named as Contractor herein; that Jerome Hudis, who signed this Agreement on behalf of the Contractor was then Vice President and Controller of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Leland F. Willis (Corporate Seal)
(Signature)

NOTE-Bank Repository, if a corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Agreement and the Certificate.

CERTIFICATE

I, _____, certify that I am the _____

Of the corporation named as Bank Depository herein: that _____,

Who signed this Agreement on behalf of the Bank Depository was then _____

Of said corporation, the said Agreement was duly signed for and in behalf of said corporation by Authority of its governing body, and is within the scope of corporate powers.

_____ (Corporate Seal)
(Signature)

AG(C)

AMENDMENT TO AGREEMENT
CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING

This is an Amendment to the Agreement entered into the First day of January 1998 between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

WHEREAS, the parties entered into an Agreement dated the First day of January 1998 entitled "Checks-Paid Method of Letter of Credit Financing;" and

WHEREAS, Brookhaven Science Associates, LLC succeeded Associated Universities, Inc., as the Contractor for Brookhaven National Laboratory effective the First day of March 1998; and

WHEREAS, The Chase Manhattan Corporation merged with J.P. Morgan & Co. Incorporated on December 31, 2000; and

WHEREAS, the parties have proceeded under the aforesaid Agreement from the First day of March 1998 until the date hereof; and

WHEREAS, the parties are desirous of formally extending the term of the aforesaid Agreement;

NOW THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. The Term of the Agreement with all its provisions and covenants is hereby extended through the Fourth day of January 2004.

2. DOE may extend the Term of the Agreement for an additional period of time to be contemporaneous with any extension of time granted by DOE to the Contractor for the operation of Brookhaven National Laboratory, provided DOE gives written notice to the Contractor and the Bank at least ninety days prior to the Fourth day of January 2004. Such notice shall not commit DOE to the extension, which shall only occur after a formal amendment to the agreement is executed by the parties.

NOTE: The Contractor, if a Company, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

CERTIFICATE

I, Gregory Fess, certify that I am the Secretary of the Company named as Contractor herein; that Brian P. Sack, who signed this Amendment on behalf of the Contractor was then Chief Financial Officer of said Company; that said Amendment was duly signed for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

Gregory Fess
Signature (Company Seal)

NOTE: Bank Repository, if a Corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

CERTIFICATE

I, Margaret E. Garris, certify that I am ~~the~~ an Assistant Secretary of the Corporation named as Bank Depository herein; that Joseph D. Bagnanni, who signed this Amendment on behalf of the Bank Depository was then a Vice President of said Corporation; that said Amendment was duly signed for and in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

Signature (Corporate Seal)

IN WITNESS WHEREOF the parties hereto have caused this Amendment which consists of three pages including the signature pages, to be executed as of the day and year first above written.

4-4-03
Date Signed

By: Robert P. Gordon, Contracting Officer
(Typed Name of Contracting Officer)

(Signature of Contracting Officer)

WITNESS

(Typed Name of Witness)

Brookhaven Science Associates, LLC
(Typed name of Contractor)

(Signature of Witness)

By: Brian P. Sack
(Typed name of Contractor's Representative)

(Signature of Contractor's Representative)

Chief Financial Officer
(Title)

Note-In case of Company, Witness not required. Type names under all signatures.

P.O. Box 5000, Bldg. 460, Upton, NY 11973
(Address)

4/2/03
(Date of Signature)

(Typed Name of Witness)

JPMorgan Chase Bank
(Typed name of Bank)

(Signature of Witness)

By: Joseph M. Bognanno
(Name of Bank Representative)

Note-In case of Company, Witness not required. Type names under all signatures.

(Signature of Bank Representative)

Vice President
(Title)

One Chase Square-Tower 10, Rochester, NY 14643
(Address)

4/3/03
(Date of Signature)

U.S. Department of Energy

and

Brookhaven Science Associates, LLC

ATTACHMENT J.5

APPENDIX E

MAKE-OR-BUY PLAN

Applicable to the Operation of
The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M094

Appendix E
Modification No. M094
Supplemental Agreement to
Contract No. DE-AC02-98CH10886

Make-or-Buy Plan

Brookhaven National Laboratory

FY 2003

BSA

BROOKHAVEN NATIONAL LABORATORY
BROOKHAVEN SCIENCE ASSOCIATES
UPTON, NEW YORK 11973-5000
UNDER CONTRACT NO. DE-AC02-98CH10886
UNITED STATES DEPARTMENT OF ENERGY

MAKE-OR-BUY IMPLEMENTATION PLAN

This plan has been prepared pursuant to Clause I.82 DEAR 970.5215-2 (Dec 2000), "Make-or-Buy Plan," of BSA's prime contract with the U. S. Department of Energy for the operation of the Brookhaven National Laboratory. It has been developed with a primary focus of providing supplies and services on the most effective cost basis, giving due regard to such considerations as quality, responsiveness, affected employees and stakeholders. The Brookhaven National Laboratory will implement the formal aspect of this plan for the areas identified in Section III during FY 2003.

SECTION I – BACKGROUND

The DOE Contract Reform Team, established by the Secretary to conduct a comprehensive review of the Department's contracting practices, recommended in 1994, that Management and Operating contractors should make more rational decisions concerning whether to "make" or "buy" the products and services required by a project or program. Such decisions should be driven by the requirement to be more cost-effective and to be consistent with the long-term strategic objectives of DOE's programs.

Brookhaven Science Associates fully supports the philosophy of the Contract Reform Team. Brookhaven National Laboratory has been implementing it in the management of its prior (AUI) and current (BSA) contracts. In many areas, service contractors supplement BNL staff (e.g., engineering design, Central Shops, job shoppers, and trades) while in others, all required services are procured by contract (e.g., cafeteria operations, construction, Child Development Center operations). A listing of the contracted services ("Make or Buy") at BNL is shown in Attachment I.

Laboratory management has continually reviewed the methods used for work accomplishment and adjusted the approach appropriately to meet changing mission requirements while carefully balancing cost and quality. Functional areas reviewed are also reflected in Attachment I.

In addition, two noteworthy examples of ongoing make-or-buy decision-making are BNL's approach to the Environmental Restoration (EM) Program and the Financial Services Accounting System.

The EM Program is funded at a level of $28-38 million annually and is being implemented by a small BNL staff managing environmental services contractors and consultants.

The Business Services Division (BSD) is using technology as an enabler to provide more efficient business processes for the Laboratory. One major change is the replacement of BNL's financial system and all its feeders with a "Commercial off-the-shelf" suite of integrated financial packages. The Division utilized "3rd Party Integrators" who have the knowledge and experience of other implementations to supplement its staff.

The implementation of these new systems began with installation of the PeopleSoft General Ledger and Project Costing modules in July 1997. Purchasing and Accounts Payable modules were installed prior to FY 1999, and the remaining modules (Inventory, Asset Management Budgeting, Accounts Receivable, HR/Payroll and Benefits modules) have been implemented during FY 2000, FY 2001, FY 2002, and FY 2003. Use of a subcontractor significantly reduced the need for manpower increases to

the Financial Services Division.

SECTION II – STRATEGY

BSA is responsible for managing contract performance, including planning, placing, and administering subcontracts as necessary to ensure the lowest overall cost and technical risk to the Department of Energy, consistent with concerns of quality and availability, applicable labor laws and regulations, and collective bargaining agreements. To discharge this responsibility in an effective manner, BSA utilizes a "make-or-buy" decision-making process. As a part of this process, the objective is to "buy" indirect-cost functions and routine services unless it can "make" at a lower cost or has other overriding reasons leading to a "make" decision.

The Laboratory has identified several functions that are considered potential candidates for "make-or-buy" our productive evaluations during FY 2003. These are included in Section III, Candidate Functions for Evaluation. Using the graded approach, each of these functions will be evaluated against a set of criteria, as outlined in Section IV.

These criteria will be used to evaluate and identify factors that may prevent the Laboratory from considering the least cost as a determining factor. The depth of analysis for each criterion will be commensurate with its applicability and its contribution towards the final decision. Results will be documented. Since the inception of the make-or-buy process, changes in the overall business environment related to being a M&O contractors has impacted the need for make-or-buy evaluations. With continued pressure to control overhead cost and reduce budget, the majority of all potential make-or-buy functional areas have been addressed. However, the Laboratory still believes that opportunities exist for potential savings. These areas of opportunity fit under the key tenant of the DEAR clause 970.5215-2, Make-or-Buy Plan, which states:

> "(b) (1) The contractor shall conduct internal productivity improvement and cost-reduction programs so that in-house performance options can be made more efficient and cost-effective."

In the past several years, the Laboratory has conducted "make-or-buy" productivity studies in the following areas:

1. Consolidation of Supply and Materiel with the former Division of Contracts and Procurement into Procurement and Property Management Division (PPM);
2. Re-engineering of Business Systems through implementation of PeopleSoft applications; and
3. The Laboratory's Credit Card Program.

The following principles guide the make-or-buy process at BNL. These principles are consistent with DOE's objectives for quality management and cost-effective operations, while maintaining BSA's commitments to its employees and the local community.

- Routine Services – BSA is committed to obtaining routine services from the least-cost source consistent with applicable labor laws and collective bargaining agreements.

- Excellence in Institutional Management and Facilities Operations – BSA is committed to

achieving excellence in the management of the Laboratory and in the planning, design, construction, and operation of its programmatic and infrastructure facilities. All BSA make-or-buy decisions will balance cost and quality to ensure excellence in the final product.

- Quality Considerations – The quality process depends heavily on the correct relationship between management and employees; an environment of trust and communication, labor-management partnering, employee involvement and commitment on the part of leaders that people are, indeed, our most important resource.

- Core Institutional Management Competencies – BSA depends on the quality, technical background, and "institutional memory" of its BNL managers to maintain the financial, environmental safety and health, and operational integrity of the Laboratory. The resource represented by the Laboratory's management staff is viewed as a significant core competency, critical to the Laboratory's continued success and pursuit of excellence. As a result, BSA will not evaluate a broad replacement of its in-house operations by a single integrated contractor. Make-or-Buy reviews will focus on discrete operations.

- BNL Subcontracts – The BSA approach to make-or-buy will be structured such that any resulting new service contractors will be under contract to BNL. To deliver the quality performance expected by DOE, BSA must retain management control over all functional areas on site.

- Regional Economic Impacts – We believe BSA has an obligation as a corporate citizen to structure its make-or-buy process to be supportive of Long Island and New York State contractors and suppliers. This may include regional competition and preferences for Long Island and New York firms.

- Collective Bargaining Agreements – BSA has in place Collective Bargaining Agreements with three recognized bargaining units covering many of the functional areas that are or may become appropriate for review under the make-or-buy process. BSA will inform and involve designated representatives of these bargaining units in the process to the extent they agree to participate.

- Employee Information and Support – One of the typically "hidden" costs of a make-or-buy review is the effect on morale, productivity, and turnover of the staff whose jobs are being considered for outsourcing. BSA will take aggressive action to ensure all affected staff are kept informed as the make-or-buy process progresses. We will provide assistance to employees who may be displaced due to a decision to outsource services. Finally, we will encourage successful contractors to offer employment to incumbent BNL employees. All workforce decisions will integrate the requirements of Section 3161 of the 1993 Defense Authorization Act and DOE's implementation of it.

- Small/Small Disadvantaged Business – As part of the make-or-buy process, BSA will analyze the availability of services provided by regional small/small disadvantaged businesses. The decision on subcontract scope will consider this availability.

- Diversity – BSA will consider the potential impacts on the diversity of the in-house workforce, which may result from outsourcing.

- Past Experience - This principle considers the issue or past experience at the Laboratory regarding decisions for the same, or similar, supplies or services.

SECTION III – CANDIDATE FUNCTIONS FOR EVALUATION

The following list includes the Laboratory functions, that are considered candidates for "make-or-buy" or internal productive evaluations for FY 2003. This list is a not necessarily all-inclusive and may change as new information becomes available or additional needs are identified. These functions are reflected in Attachment I.

FY 2003 Functional Areas
Photograph and Graphic Arts
Analytical Laboratory Services

BSA will identify additional specific Make-or-Buy functions to be reviewed for FY 2004 through FY 2008. These functions will be selected at the beginning of the fiscal year and added to Attachment I.

SECTION IV – EVALUATION CRITERIA

Each function in Section III will be evaluated such that the impacts of various factors on the "make-or-buy" decision are properly considered. The applicability and importance of these factors may vary depending upon the item to be evaluated. Generally, the quality performance at least cost should be the determining factor in reaching a "make-or-buy" decision unless an overriding reason is identified through the consideration of criteria 1 through 11 below. Evaluation of each item will include, but not be limited to, the following criteria:

1. **Availability of Satisfactory Source** – This criterion considers the competence, ability, experience, and capacity available from outside sources to establish that they would be responsive and responsible and be able to perform in a timely manner. The consideration will also include the diversity and quality of the vendor's workforce.

2. **Affirmative Action** – This criterion will consider the impact of the Laboratory's policy on affirmative action and upward mobility potential of protected class employees on "make-or-buy" decisions.

3. **Timeliness of Procurement** – This criterion considers the impact of procurement lead-time on continuity of the Laboratory's operations and services.

4. **Control of Technical and Schedule Interface** – This criterion considers the Laboratory's ability to effectively control technical and schedule interfaces with other programs or operations as well as the necessity for close interaction between the Laboratory and the suppliers.

5. **Risk** – This criterion considers and quantifies the potential for unwanted negative consequences that may impact quality, cost, schedule, sensitive information, personal safety, property, or environment.

6. **National Security** – This criterion considers the impact on security when the work is of a classified nature or will involve technologies and/or materials that are classified or restricted.

7. **Maintenance of Core Competency** – This criterion considers the impact of outsourcing on the retention of key or unique in-house capabilities, capacities, or personnel deemed essential to recurring support functions or scientific needs. It will also consider whether in-house performance is considered key to ensuring quality, operational continuity, and environmental, safety, and health compliance as well as whether the function involves highly skilled, experienced personnel with detailed knowledge of major BNL systems or facilities.

8. **Proprietary Processes and Information** – This criterion considers the issue or proprietary processes owned by the Laboratory, which may not be legally transferable to the outside source and the issue of proprietary information provided and handled by the Laboratory under CRADAs and other agreements with the private sector.

9. **Impact on Future Mission** – This criterion considers the issue of the impact of a "Make" or "Buy" decision on known future mission or program activities at the Laboratory.

10. **New Facilities** - This criterion considers the issue where the construction of new or additional facilities is required that the cost of such facilities is in the government's best interest when compared to subcontracting or privatization alternatives.

11. **Contractual Agreements** – This criterion considers the impact of applicable constraints contained in collective bargaining agreements and other existing contracts on the "make-or-buy" decision. The Laboratory has collective bargaining agreements with three recognized bargaining units [International Brotherhood of Electrical Workers (IBEW) Local 2230, Long Island Guards Union, and Oil Chemical & Atomic Workers International.]

    The IBEW Local 2230 contract prohibits subcontracting for a labor classification covered by the agreement for a period of one year after a layoff by the Laboratory in that classification. Related language establishes an employee (FTE) strength number or "ceiling" above which the Laboratory can layoff without invoking the "subcontracting clause." This language may affect the implementation of options evaluated under this Plan by prohibiting the outsourcing of functions currently performed by bargaining unit employees. The IBEW Contract does provide that the Laboratory may be required to subcontract work in responses to a regulation

or directive of the Department of Energy. The Union may terminate its contract if subcontracting the work results in a layoff of its members.

In the event it still appears that a "buy" decision is still the preferred decision, anticipated operational improvements and cost will be evaluated (as indicated below) to determine whether outsourcing or in-house performance is the least cost.

Cost Benefit – This criterion considers operational improvements and the comparative cost of performing a function in-house versus contracting it out. The analysis will include, as applicable, the costs for subcontracting, new equipment and facilities for additional personnel and for maintaining continuity of operations when changing suppliers.

Make-or-Buy Plan FY 2003
Attachment I

Service/Function	Must Make	Must Buy	Can Make or Buy	Rationale for Make Decision
Analytical Services/Laboratory Analysis***	X	X		Previously determined to be Must Make/Must Buy. BNL maintains an on-site laboratory as a Core Competence while also outsourcing to subcontractors under blanket orders large volume activity (i.e. Environmental Restoration) . However new consideration is being given to outsourcing
Architect/Engineer (A/E) & Consulting Engineering Services	X	X		BNL maintains Core Competence A/E capability as part of Plant Engineering operations while also outsourcing to subcontractors under blanket based economic advantage due to irregular demand and turn around time.
Cafeteria Operations*		X		N/A
Chemical Hazardous & Radioactive Waste Disposal		X		N/A
Child Development Center Operation*		X		N/A
Computer Hardware Maintenance		X		N/A
Copier and Printer Maintenance	X	X		BNL maintains Core Competence on-site services to meet tight schedules while also outsourcing to subcontractors under blanket orders routine maintenance.
Environmental Restoration		X		N/A
Fabrication Support (i.e. machine shops)	X	X		BNL maintains an on-site Core Competence to meet unique requirement and schedules from the scientific staff (i.e. RHIC project) as well outsourcing to subcontractors for routine fabrications.
Job Shoppers*		X		N/A

Make-or-Buy Plan FY 2003
Attachment I

Service/Function	Must Make	Must Buy	Can Make or Buy	Rationale for Make Decision
Laboratory Equipment Maintenance	X	X		BNL maintains a Core Competence on-site service for scientific projects (RHIC, AGS and Light Source) as these experiments run 24 hours and cannot wait for repairs. Also outsourcing to subcontractors for routine and backup support.
Laboratory Services (i.e. employment advertising, information systems)	X	X		BNL maintains a Core Competence on site for public affairs to support interaction with the community. Also BNL outsourced advertising for routine activities.
Legal Services	X	X		BNL maintains an on-site Core Competence Legal Staff of two while also outsourcing to subcontractors for special needs such as environmental activities and lawsuits.
R&D Technical Assistance	X	X		BNL is a Research and Development Lab and must maintains an on-site Core Competence while also outsourcing to subcontractors for additional support such as graduate Students and colleges and university collaborating on R&D projects.
Software Support	X	X		BNL maintains an on-site Core Competence to support the Financial Services Computing (Accounting, Acct payable, Accts receivable, IPAP) and ITD for LAN and workstation for administration and research divisions. BNL outsources to subcontractors to augment these two Divisions during peak periods and on special projects (i.e. PeopleSoft)

Make-or-Buy Plan FY 2003
Attachment I

Service/Function	Must Make	Must Buy	Can Make or Buy	Rationale for Make Decision
Special Materials and Supplies	X	X		BNL maintains an on-site Core Competence to support warehousing of materials for quick turn around to the lab while also outsourcing to subcontractors under blanket orders and credit cards routine items such office supplies
Telecommunications		X		N/A
Training (i.e. computer software and hardware, quality assurance, reactor operation and maintenance, safeguards and security, personnel development)	X	X		BNL maintains an on-site Core Competence for training in areas such as safety while also outsourcing to subcontractors for unique training such as word processing or PeopleSoft.
Management of Environmental Restoration Division		X		N/A
Management of the Waste Management Division		X		N/A
Management of the Reactor Division		X		N/A
Laundry**		X		Make-or-Buy Study
Automobile Fleet Operations**	X			Make-or-Buy Study
Temporary Clerical Support**	X			Make-or-Buy Study
Custodial Services**	X			Make-or-Buy Study
Heavy Equipment Maintenance**	X			Make-or-Buy Study
Packaged Boiler Maintenance**	X			Make-or-Buy Study
Painting**	X			Make-or-Buy Study
Security**	X			Make-or-Buy Study
Travel Office Operations**	X			Make-or-Buy Study
Telecommunications System Management Services**		X		N/A

Make-or-Buy Plan FY 2003
Attachment I

Service/Function	Must Make	Must Buy	Can Make or Buy	Rationale for Make Decision
LAN operations Desktop operations & Computer Hardware Maintenance			X	Make-or-Buy Study
Photography And Graphic Art Services***			X	TBD
Central Shops	X	X		Make-or-Buy Report
Consolidation of Supply and Material with Procurement	X			Determined that consolidation was most cost efficient way to provide Services
Reengineering of Business systems (PeopleSoft)	X	X		Determined that Procuring Commercial Off the Shelf Software was most economical

* Represents an activity which is totally subcontracted.
** Represents activities in which a formal report was submitted to DOE-BAO with the rationale for determination
*** Represents function to be evaluated in FY2003

Appendix I
Modification No. M094
Supplemental Agreement to
Contract No. DE-AC02-98CH10886

U.S. Department of Energy

and

Brookhaven Science Associates, LLC

ATTACHMENT J.9

APPENDIX I

DOE DIRECTIVES/LIST B

Applicable to the Operation of
The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M094

APPENDIX I

DOE DIRECTIVES

There is no List A to this Appendix.

List B to this Appendix contains two parts as follows:

Part I: "Directives List"

This section contains a list of Directives that are considered by DOE as applicable to the BNL contract.

Part II: "Partial Deletions of Directives"

This section contains a list of Directives that were accepted and implemented by the previous contractor but have subsequently been revised by DOE to remove certain sections.

Appendix I - Part I

CRD=Contractor Requirements Document

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
7/14/99	N 142.1	UNCLASSIFIED FOREIGN VISITS AND ASSIGNMENTS (Extended until 5/14/03 by DOE N 251.47 dated 8/14/02)
2/26/01	N 153.1	CONNECTIVITY TO ATMOSPHERIC RELEASE ADVISORY CAPABILITY
10/02/00	N 203.1	CRD - SOFTWARE QUALITY ASSURANCE (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
7/26/99	N 205.1	CRD - UNCLASSIFIED CYBER SECURITY PROGRAM
11/1/99	N 205.2	CRD - FOREIGN NATIONAL ACCESS TO DOE CYBER SYSTEMS (Extended until 2/16/04 by DOE N 205.5 dated 2/14/03)
11/23/99	N 205.3	CRD - PASSWORD GENERATION, PROTECTION, AND USE (Extended until 2/16/04 by DOE N 205.5 dated 2/14/03)
3/18/02	N 205.4	CRD - HANDLING CYBER SECURITY ALERTS AND ADVISORIES AND REPORTING CYBER SECURITY INCIDENTS
1/15/02	N 231.1	CRD – ENVIRONMENT, SAFETY, AND HEALTH REPORTING NOTICE (Extended until 1/15/04 by DOE N 231.2 dated 12/30/02)
1/12/01	N 350.6	CRD - ACCEPTANCE OF VALID WORKERS' COMPENSATION CLAIMS
9/30/95	N 441.1	RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES (using ORNL/TM-11497 in lieu of Attachment 1)(Extended until 6/30/00 by DOE N 441.4 dated 11/20/98)
2/5/01	N 450.4	CRD - ASSIGNMENT OF RESPONSIBILITIES FOR EXECUTIVE ORDER 13148, GREENING THE GOVERNMENT THROUGH LEADERSHIP IN ENVIRONMENTAL MANAGEMENT (Extended until 3/1/03 by DOE N 450.9, dated 9/3/02)
10/17/01	N 450.7	CRD - THE SAFE HANDLING, TRANSFER, AND RECEIPT OF BIOLOGICAL ETIOLOGIC AGENTS AT DOE FACILITIES (Extended until 03/30/03 by DOE N 450.10 dated 12/30/02)
12/15/00	N 470.2	CRD - REPORTING UNOFFICIAL FOREIGN TRAVEL (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
4/13/01	N 471.3	CRD - REPORTING INCIDENTS OF SECURITY CONCERN (Extended until 06/30/03 by DOE N 251.51 dated 12/19/02)
5/26/00	N 473.4	CRD - DEPARTMENT OF ENERGY BADGES (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
6/5/00	N 473.5	CRD - SECURITY AREA VOUCHING AND PIGGYBACKING (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
10/26/00	N 473.7	CRD - EXPLOSIVE DETECTION PROGRAM (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
8/7/02	N 473.8	CRD – SECURITY CONDITIONS
2/28/03	N 481.1	CRD – REIMBURSABLE WORK FOR DEPARTMENT OF HOMELAND SECURITY
11/3/99	O 110.3	CRD - CONFERENCE MANAGEMENT
9/29/95	O 130.1	CRD - BUDGET FORMULATION PROCESS (Extended until 5/1/03 by DOE N 251.45 dated 5/29/02)
9/30/95	O 135.1	BUDGET EXECUTION-FUNDS DISTRIBUTION AND CONTROL (Extended until 5/1/03 by DOE N 251.45 dated 5/29/02)

***See Part II, Partial Deletions**

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
11/01/00	O 151.1A	CRD - COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM
9/30/96	O 200.1	CRD - INFORMATION MANAGEMENT PROGRAM
9/27/95 10/26/95 5/1/95	O 210.1 Change 1 Change 2	CRD - PERFORMANCE INDICATORS AND ANALYSIS OF OPERATIONS INFORMATION
3/22/01	O 221.1	CRD - REPORTING FRAUD, WASTE, AND ABUSE TO THE OFFICE OF INSPECTOR GENERAL
3/22/01	O 221.2	CRD - COOPERATION WITH THE OFFICE OF INSPECTOR GENERAL
11/26/97	O 225.1A	CRD - TYPE A AND B ACCIDENT INVESTIGATIONS
9/30/95 10/26/95 11/7/96	O 231.1 Change 1 Change 2	CRD - ENVIRONMENT, SAFETY & HEALTH REPORTING (DOE O 470.2A, dated 3/1/00, cancels Paragraph 5b(2).
9/30/95 11/7/96 01/28/00	M 231.1-1 Change 1 Change 2	ENVIRONMENT, SAFETY, AND HEALTH REPORTING MANUAL DOE O 470.2A, dated 3/1/00, cancels Chapter IV. DOE N 231.1, dated 1/15/02, cancels (Paragraphs 2a, 2a(1), 2a(2), 2b(1) 2b(2), 2i(3)(a) through 2i(3)(d) of Chapter II and Appendix A
8/1/97	O 232.1A	CRD - OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)
7/21/97	M 232.1-1A	OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)
4/9/01	O 241.1A	CRD - SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT
1/30/98	O 251.1A	CRD - DIRECTIVES SYSTEM
11/19/99	O 252.1	CRD - TECHNICAL STANDARDS PROGRAM
9/30/96 5/8/98	O 350.1 Change 1	CRD - CONTRACTOR HUMAN RESOURCE MANAGEMENT PROGRAMS CRD - EMPLOYEE BENEFITS
7/12/01	O 350.2	CRD - USE OF FACILITY CONTRACTOR EMPLOYEES FOR SERVICES TO DOE IN THE WASHINGTON, D.C., AREA
04/20/99	O 412.1	CRD – WORK AUTHORIZATION SYSTEM
4/18/02	O 413.1A	CRD - MANAGEMENT CONTROL PROGRAM
1/08/01	O 413.2A	CRD - LABORATORY DIRECTED RESEARCH AND DEVELOPMENT
10/13/00	O 413.3	CRD - PROGRAM AND PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS
11/24/98	O 414.1	CRD - QUALITY ASSURANCE
5/20/02	O 420.1A	CRD - FACILITY SAFETY
1/08/01	O 420.2A	CRD - SAFETY OF ACCELERATOR FACILITIES
12/21/00	O 425.1B	CRD - STARTUP AND RESTART OF NUCLEAR FACILITIES
10/14/98	O 430.1A	CRD - LIFE CYCLE ASSET MANAGEMENT (DOE O 430.2A, dated 4/15/02, cancels Paragraphs 6d(2), 6h, 7b(1), 7b(2), and 7e(16).)
4/15/02	O 430.2A	CRD - DEPARTMENTAL ENERGY AND UTILITIES MANAGEMENT

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
6/01/01	O 433.1	CRD - MAINTENANCE MANAGEMENT PROGRAM FOR DOE NUCLEAR FACILITIES
7/9/99 8/28/01	O 435.1 Change 1	CRD - RADIOACTIVE WASTE MANAGEMENT
7/9/99 6/19/01	M 435.1-1 Change 1	RADIOACTIVE WASTE MANAGEMENT MANUAL
3/27/98	O 440.1A	CRD - WORKER PROTECTION MANAGEMENT FOR DOE CONTRACTOR EMPLOYEES
3/8/02	O 440.2A	CRD - AVIATION MANAGEMENT AND SAFETY
6/6/01	O 442.1A	CRD - DEPARTMENT OF ENERGY EMPLOYEE CONCERNS PRG.
5/15/00	O 443.1	PROTECTION OF HUMAN SUBJECTS
1/15/03	O 450.1	CRD – ENVIRONMENTAL PROTECTION PROGRAM
10/26/00 9/28/01	O 451.1B Change 1	NATIONAL ENVIRONMENTAL POLICY ACT COMPLIANCE PROGRAM
10/2/96	O 460.1A	CRD - PACKAGING AND TRANSPORTATION SAFETY
9/27/95 10/26/95	O 460.2 Change 1	CRD - DEPARTMENTAL MATERIALS TRANSPORTATION AND PACKAGING MANAGEMENT
9/23/02	M 460.2-1	CRD – RADIOACTIVE MATERIAL TRANSPORTATION PRACTICES MANUAL
9/28/95 6/21/95	O 470.1 Change 1	CRD - CONTRACTOR SAFEGUARDS AND SECURITY PROGRAM REQUIREMENTS (Extended until 5/14/03 by DOE N 251.47 dated 8/14/02)
10/30/02	M 470.1-1	CRD – SAFEGUARDS AND SECURITY AWARENESS PROGRAM
10/31/02	O 470.2B	CRD - INDEPENDENT OVERSIGHT AND PERFORMANCE ASSURANCE PROGRAM
6/30/00	O 471.1A	CRD - IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION
6/30/00 10/23/01	M 471.1-1 Change 1	IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION MANUAL
3/27/97	O 471.2A	CRD - INFORMATION SECURITY PROGRAM (Extended until 5/14/03 by DOE N 251.47, dated 8/14/02)
1/6/99	M 471.2-1B	CRD - CLASSIFIED MATTER PROTECTION AND CONTROL MANUAL
8/3/99	M 471.2-2	CRD - CLASSIFIED INFORMATION SYSTEMS SECURITY MANUAL (DOE N 205.3, dated 11/23/99 cancels Paragraphs 4j(2) and 4j(6) of Chapter VI, and Paragraph 12a(2)(a) of Chapter VII.) (Notice 205.4 dated 3/18/02 cancels Chapter III Section 8)
3/24/97	O 472.1B	CRD - PERSONNEL SECURITY ACTIVITIES (Extended until 5/14/03 by DOE N 251.47 dated 8/14/02)
7/12/01	M 472.1-1B	PERSONNEL SECURITY PROGRAM MANUAL
12/23/02	O 473.1	CRD – PHYSICAL PROTECTION PROGRAM
12/23/02	M 473.1-1	CRD – PHYSICAL PROTECTION PROGRAM MANUAL
6/30/00	O 473.2	CRD - PROTECTIVE FORCE PROGRAM

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
1/17/02	M 473.2-1A	FIREARMS QUALIFICATION COURSES MANUAL
6/30/00 12/20/01	M 473.2-2 Change 1	PROTECTIVE FORCE PROGRAM MANUAL
11/20/00	O 474.1A	CRD - CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
11/22/00	M 474.1-1A	CRD - MANUAL FOR CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
2/10/98 4/27/98 11/16/98	M 474.1-2 Change 1 Change 2	MANUAL FOR NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM REPORTING AND DATA SUBMISSION (Extended until 2/11/04 by DOE N 474.2 dated 2/11/03)
5/8/98	M 475.1-1	CRD - IDENTIFYING CLASSIFIED INFORMATION
9/28/01	O 481.1B	CRD - WORK FOR OTHERS (NON DOE FUNDED WORK)
1/03/01 9/28/01	M 481.1-1A Change 1	REIMBURSABLE WORK FOR NON-FEDERAL SPONSORED PROCESS MANUAL
1/12/01	O 482.1	CRD - DOE FACILITIES TECHNOLOGY PARTNERING PROGRAMS
1/12/01	O 483.1	CRD - DOE COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS
1/12/01	M 483.1-1	DOE COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS
1/6/03	O 534.1B	CRD - ACCOUNTING
8/25/00 11/8/02	O 551.1A Change 1	CRD - OFFICIAL FOREIGN TRAVEL
7/12/00	M 573.1-1	MAIL SERVICES USER'S MANUAL
5/2/01	P 141.1	DEPARTMENT OF ENERGY MANAGEMENT OF CULTURAL RESOURCES
6/10/00	P 413.1	PROGRAM AND PROJECT MANAGEMENT POLICY FOR THE PLANNING, PROGRAMMING, BUDGETING, AND ACQUISITION OF CAPITAL ASSETS
5/08/01	P 470.1	INTEGRATED SAFEGUARDS AND SECURITY MANAGEMENT POLICY
5/20/02	P 580.1	MANAGEMENT POLICY FOR PLANNING, PROGRAMMING, BUDGETING, OPERATION, MAINTENANCE AND DISPOSAL OF REAL PROPERTY
6/23/92	1270.2B	SAFEGUARDS AGREEMENT WITH THE INTERNATIONAL ATOMIMC ENERGY AGENCY
7/14/88 10/5/88 5/18/92	2110.1A Change 1 Change 2	PRICING OF DEPARTMENTAL MATERIALS AND SERVICES
6/8/92	2300.1B	AUDIT RESOLUTION AND FOLLOWUP
2/8/90 6/5/90 1/7/93	5400.5* Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT
5/15/84 5/16/88 5/16/89 9/20/91	5480.4* Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS

***See Part II, Partial Deletions**

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
7/9/90 5/18/92 10/23/01	5480.19 Change 1 Change 2	CONDUCT OF OPERATIONS REQUIREMENTS FOR DOE FACILITIES
11/15/94	5480.20A	PERSONNEL SELECTION, QUALIFICATION AND TRAINING REQUIREMENTS FOR DOE NUCLEAR FACILITIES
1/19/93	5480.30	NUCLEAR REACTOR SAFETY DESIGN CRITERIA
9/20/91	5530.1A	ACCIDENT RESPONSE GROUP
1/14/92 4/10/92	5530.3 Change 1	RADIOLOGICAL ASSISTANCE PROGRAM
5/8/85	5560.1A	PRIORITIES AND ALLOCATIONS PROGRAM
8/1/80	5610.2	CONTROL OF WEAPON DATA
5/26/94	5660.1B	MANAGEMENT OF NUCLEAR MATERIALS
9/4/92	5670.3	COUNTERINTELLIGENCE PROGRAM

ACCOUNTING PRACTICES AND PROCEDURES HANDBOOK		
5/2/83	Chapter V	INVENTORIES
6/30/80	Chapter X	PRODUCT COST ACCOUNTING

Appendix I - Part II

PARTIAL DELETIONS OF DIRECTIVES				
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**	**DELETION DIRECTIVE DATE**	**SECTIONS DELETED**
2/8/90 6/5/90 1/7/93	5400.5 Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT	O 231.1 9/30/95 Change 1 10/26/95	Chapter II: Para 1a(3) (a)
5/15/84 5/16/88 5/16/89 9/20/91	5480.4 Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS	O 440.1 9/30/95 Change 1 10/26/95	Attachment 2: Paras 2c, 2d(2) - (3), 2e(1) - (8); and Attach. 3: Paras 2c,; 2d(2) - (3), 2e(1) - (7)

U.S. Department of Energy

and

Brookhaven Science Associates, LLC

ATTACHMENT J.12

APPENDIX L

COMPUTATION OF FEE

Applicable to the Operation of
The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M094

APPENDIX L

FY2003 FEE COMPUTATION

FEE BASIS

APPENDIX L

FY2003 FEE COMPUTATION

FEE BASIS

For FY2003, the performance measure model has one class of performance measures in Appendix B of the Prime Contract that is directly associated with fee (fee bearing). This reflects the approved FY2003 Critical Outcomes of Science & Technology, Environmental Restoration Laboratory Management and Operations. The FY2003 fee structure is in consonance with the following guidelines:

1. The maximum fee is to be in consonance with fees paid for the operation of similar FFRDC laboratories and will have a single tier structure;

2. The fees for integrated subcontractor(s) are included in the total fee;

3. The fee structure is to be based on individual critical outcomes and their associated weights as determined separately;

4. The critical outcome of Science and Technology will act as a "gate," in that a score of Excellent or above is required; there will be no fee if any critical outcome is scored as Marginal or below.

Maximum Fee

The maximum fee that BSA can earn under this matrix for FY 2003 is provisionally established at $7,000,000, if all performance measures areas were rated as "outstanding."

Fee Matrix and Fee Percentage Curve (Figure 1)

Figure (1) below is the fee-determining matrix for the case where Science and Technology (S&T) achieves a score of Excellent or above. The right two columns of the Figure (1) matrix contain a fee percentage that determines the fee earned within each of the score ranges of Outstanding, Excellent, Good and Marginal. In the event that a Critical Outcome score is between two matrix scores, the fee percentage will be determined by interpolation.

If S&T achieves a score below Excellent, the fee matrix is inapplicable. If S&T is scored in the Good range, a single partial-cost-recovery fee of $2.1M (the annual BSA operating budget) is applicable. If any critical Outcome (including S&T) is Marginal there will be no fee.

Fee for Integrated Subcontractors

The Laboratory's "integrated subcontractors" are defined as those subcontractors that are part of the BSA management structure and have responsibilities for the direct supervision of BSA employees. In FY2003, BSA's maximum fee pool is the only fee pool available for the integrated.

Payments and Advances

For purposes of installments of fee, the historical fee of $6,600,000, based on an excellent performance rating will be used for determining the 90% fee payment authorized for FY 2003 which is $5,940,000. If, after DOE's evaluation of BSA's performance for FY2003, a higher amount of fee is authorized then BSA may draw the difference between the higher fee and the amount received through the periodic installments for FY 2003. If however, after DOE's evaluation of BSA's performance for FY2003, a lower amount of fee is authorized, BSA will reimburse DOE all amounts received through periodic installments above the authorized fee amount within 30 days after receiving notice from DOE of the fee authorized for FY2003.

Attachment 1

Brookhaven Science Associates
Fiscal Year 2003

APPENDIX L

Figure (1): Fee Determination Matrix (000)

Critical Outcome (CO)			**Excellence in Science & Technology**	**Environmental Restoration**		**Laboratory Management and Operations**		Max Fee: $ 7,000		
CO Weight			60%	8%		32%		% of Max Fee		
CO Max Fee			$ 4,200.0	$ 560.0		$ 2,240.0		Science		Non-Science
		Score								
		4.00	4,200.0	560.0		2,240.0		100.0%		100.0%
Outstanding		3.75	4,128.6	550.5		2,201.9		98.3%		98.3%
	>	3.50	4,061.4	541.5		2,166.1		96.7%		96.7%
		3.50	3,990.0	532.0		2,128.0		95.0%		95.0%
Excellent		3.00	3,780.0	504.0		2,016.0		90.0%		90.0%
		2.75	3,570.0	476.0		1,904.0		85.0%		85.0%
	>	2.50	3,360.0	448.0		1,792.0		80.0%		80.0%
		2.50	Flat 2,100.0	406.0	*	1,624.0	*	30.0%	**	72.5% *
Good		2.00	Flat 2,100.0	364.0	*	1,456.0	*	30.0%	**	65.0% *
		1.75	Flat 2,100.0	322.0	*	1,288.0	*	30.0%	**	57.5% *
	>	1.50	Flat 2,100.0	280.0	*	1,120.0	*	30.0%	**	50.0% *
		1.50						0.0%		0.0%
Marginal/ Unsatisfactory		↕	**No Fee**							
		0.00						0.0%		0.0%

* No Fee for this category if Science's rating is in the "Good" range.

** This reflects a percentage of total fee.

Note: If any of the Critical Outcomes are rated less than "Good" then the Contractor earns no fee for FY 2003.